

	Mom	G3 ID	% CD4+
Pedigree 57	G2 # 1	57.1.1	22
		57.1.2	26
		57.1.3	24
	G2 # 4	57.4.1	15
		57.4.2	18
	G2 # 5	57.5.1	21
		57.5.2	19
		57.5.3	24
		57.5.4	22
		57.5.5	19
		57.5.6	17
Pedigree 9	G2 # 4	9.4.1	6
		9.4.2	20
		9.4.3	16
		9.4.4	12
		9.4.5	20
		9.4.6	15
		9.4.7	24
		9.4.8	27
		9.4.9	5
	G2 # 5	9.5.1	18
		9.5.2	20
		9.5.3	22
		9.5.4	20
		9.5.5	22
		9.5.6	20
		9.5.7	23

average	19.1
stdev	5.2
= + 2SD	29.6
= -2SD	8.7

FIG. 1

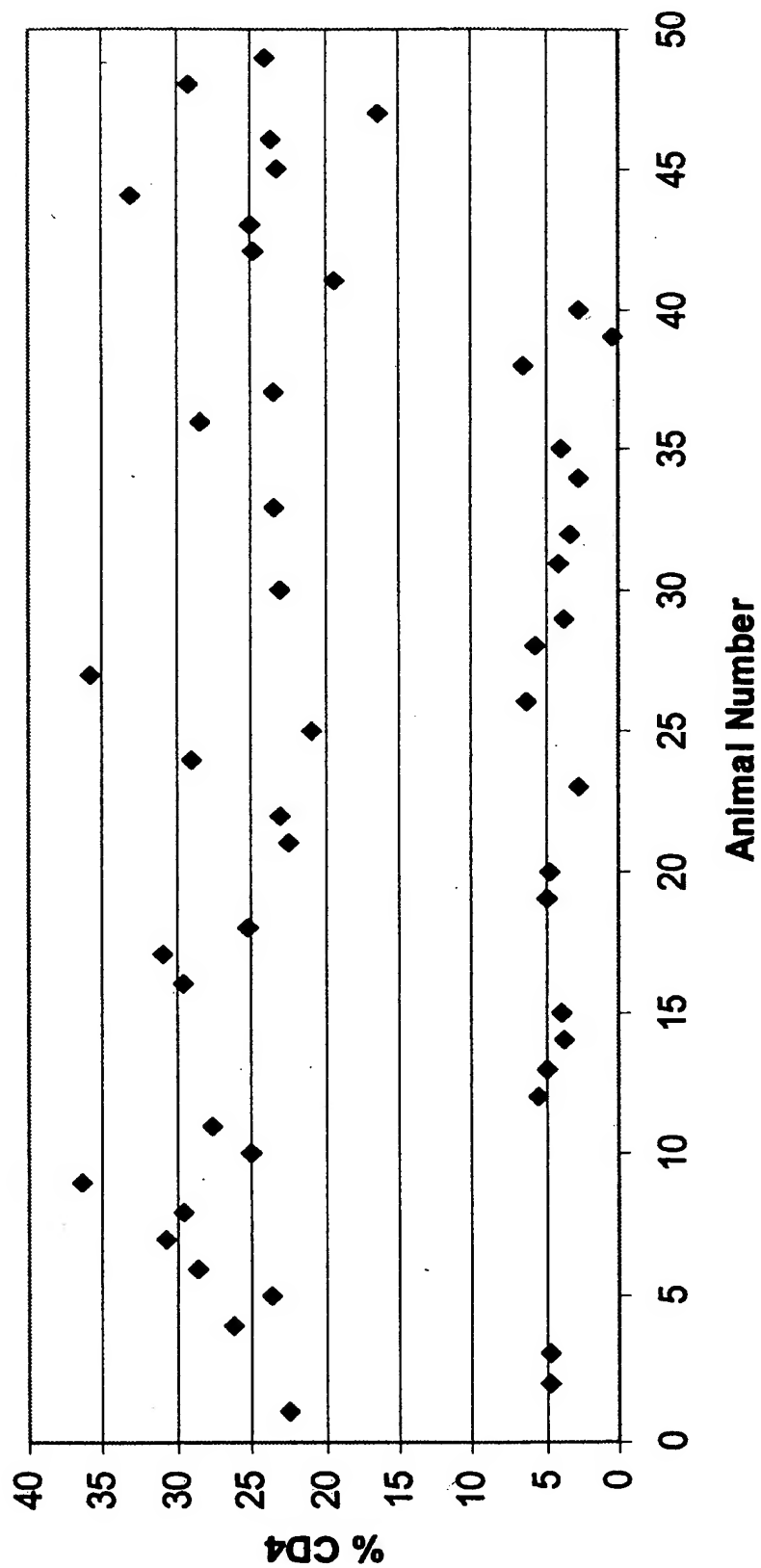


FIG. 2

1	GCGCTCCAGC	CGC ATG TCGC	AAGGCCTCCA	GCTCCTGTTT	CTAGGCTGCG
51	CCTGCAGCCT	GGCACCCGCG	ATGGCGATGC	GGGAGGTGAC	GGTGGCTTGC
101	TCCGAGACCG	CCGACTTGCC	TTGCACAGCG	CCCTGGGACC	CGCAGCTCTC
151	CTATGCAGTG	TCCTGGGCCA	AGGTCTCCGA	GAGTGGCACT	GAGAGTGTGG
201	AGCTCCCGGA	GAGCAAGCAA	AACAGCTCCT	TCGAGGCCCC	CAGGAGAAGG
251	GCCTATTCCC	TGACGATCCA	AAACACTACC	ATCTGCAGCT	CGGGCACCTA
301	CAGGTGTGCC	CTGCAGGAGC	TCGGAGGGCA	GCGCAACTTG	AGCGGCACCG
351	TGGTTCTGAA	GGTGACAGGA	TGCCCCAAGG	AAGCTACAGA	GTCAACTTTC
401	AGGAAGTACA	GGGCAGAAGC	TGTGTTGCTC	TTCTCTCTGG	TTGTTTTCTA
451	CCTGACACTC	ATCATTTTCA	CCTGCAAATT	TGCACGACTA	CAAAGCATT
501	TCCCAGATAT	TTCTAAACCT	GGTACGGAAC	AAGCTTTTCT	TCCAGTCACC
551	TCCCCAAGCA	AACATTTGGG	GCCAGTGACC	CTTCCTAAGA	CAGAAACGGT
601	ATGA GTAGGA	TCTCCACTGG	TTTTTACAAA	GCCAAGGGCA	CATCAGATCA
651	GTGTGCCTGA	ATGCCACCCG	GACAAGAGAA	GAATGAGCTC	CATCCTCAGA
701	TGGCAACCTT	TCTTTGAAGT	CCTTCACCTG	ACAGTGGGCT	CCACACTACT
751	CCCTGACACA	GGGTCTTGAG	CACCATCATA	TGATCACGAA	GCATGGAGTA
801	TCACCGCTTC	TCTGTGGCTG	TCAGCTTAAT	GTTTCATGTG	GCTATCTGGT
851	CAACCTCGTG	AGTGCTTTTC	AGTCATCTAC	AAGCTATGGT	GAGATGCAGG
901	TGAAGCAGGG	TCATGGGAAA	TTTGAACACT	CTGAGCTGGC	CCTGTGACAG
951	ACTCCTGAGG	ACAGCTGTCC	TCTCCTACAT	CTGGGATACA	TCTCTTTGAA
1001	TTTGTCTGT	TTCGTTGCAC	CAGCCCAGAT	GTCTCACATC	TGGCGGAAAT
1051	TGACAGGCCA	AGCTGTGAGC	CAGTGGGAAA	TATTTAGCAA	ATAATTTCCC
1101	AGTGCGAAGG	TCCTGCTATT	AGTAAGGAGT	ATTATGTGTA	CATAGAAATG
1151	AGAGGTCAGT	GAACATATTCC	CCAGCAGGGC	CTTTTCATCT	GGAAAAGACA
1201	TCCACAAAAG	CAGCAATACA	GAGGGATGCC	ACATTTATTT	TTTTAATCTT
1251	CATGTACTTG	TCAAAGAAGA	ATTTTTCATG	TTTTTTTCAA	GAAGTGTGTT
1301	TCTTTCCTTT	TTTAAAATAT	GAAGGTCTAG	TTACATAGCA	TTGCTAGCTG
1351	ACAAGCAGCC	TGAGAGAAGA	TGGAGAATGT	TCCTCAAAAT	AGGGACAGCA
1401	AGCTAGAAGC	ACTGTACAGT	GCCCTGCTGG	GAAGGGCAGA	CAATGGACTG
1451	AGAAACCAGA	AGTCTGGCCA	CAAGATTGTC	TGTATGATTC	TGGACGAGTC
1501	ACTTGTGGTT	TTCACTCTCT	GGTTAGTAAA	CCAGATAGTT	TAGTCTGGGT
1551	TGAATACAAT	GGATGTGAAG	TTGCTTGGGG	AAAGCTGAAT	GTAGTGAATA
1601	CATTGGCAAC	TCTACTGGGC	TGTTACCTTG	TTGATATCCT	AGAGTTCTGG
1651	AGCTGAGCGA	ATGCCTGTCA	TATCTCAGCT	TGCCCATCAA	TCCAAACACA
1701	GGAGGCTACA	AAAAGGACAT	GAGCATGGTC	TTCTGTGTGA	ACTCCTCCTG
1751	AGAAACGTGG	AGACTGGCTC	AGCGCTTTGC	GCTTGAAGGA	CTAATCACAA
1801	GTTCTTGAAG	ATATGGACCT	AGGGGAGCTA	TTGCGCCACG	ACAGGAGGAA
1851	GTTCTCAGAT	GTTGCATTGA	TGTAACATTG	TTGCATTTCT	TTAATGAGCT
1901	GGGCTCCTTC	CTCATTTGCT	TCCCAAAGAG	ATTTTGTCCC	ACTAATGGTG
1951	TGCCCATCAC	CCACACTATG	AAAGTAAAAG	GGATGCTGAG	CAGATACAGC
2001	GTGCTTACCT	CTCAGCCATG	ACTTTCATGC	TATTAAAAGA	ATGCATGTGA
2051	A				

FIG. 3

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1 GCGCTCCAGC CGCATGTCGC AAGGCCTCCA GCTCCTGTTT CTAGGCTGCG
51 CCTGCAGCCT GGCACCCGCG ATGGCGATGC GGGAGGTGAC GGTGGCTTGC
101 TCCGAGACCG CCGACTTGCC TTGCACAGCG CCCTGGGACC CGCAGCTCTC
151 CTATGCAGTG TCCTGGGCCA AGGTCTCCGA GAGTGGCACT GAGAGTGTGG
201 AGCTCCCGGA GAGCAAGCAA AACAGCTCCT TCGAGGCCCC CAGGAGAAGG
251 GCCTATTCCC TGACGATCCA AAACACTACC ATCTGCAGCT CGGGCACCTA
301 CAGGTGTGCC CTGCAGGAGC TCGGAGGGCA GCGCAACTTG AGCGGCACCG
351 TGGTTCTGAA GGTGACAGGA TGCCCCAAGG AAGCTACAGA GTCAACTTTC
401 AGGAAGTACA GGGCAGAAGC TGTGTTGCTC TTCTCTCTGG TTGTTTTCTA
451 CCTGACACTC ATCATTTTCA CCTGCAAATT TGCACGACTA CAAAGCATTT
501 TCCCAGATAT TTCTAAACCT GGTACGGAAC AAGCTTTTCT TCCAGTCACC
551 TCCCCAAGCA AACATTTGGG GCCAGTGACC CTTCTAAGA CAGAAACGGT
601 AAGAGTAGGA TCTCCACTGG TTTTACAAA GCCAAGGGCA CATCAGATCA
651 GTGTGCCTGA ATGCCACCCG GACAAGAGAA GAATGAGCTC CATCCTCAGA
701 TGGCAACCTT TCTTTGAAGT CCTTCACCTG ACAGTGGGCT CCACACTACT
751 CCCTGACACA GGGTCTTGAG CACCATCATA TGATCACGAA GCATGGAGTA
801 TCACCGCTTC TCTGTGGCTG TCAGCTTAAT GTTTCATGTG GCTATCTGGT
851 CAACCTCGTG AGTGCTTTTC AGTCATCTAC AAGCTATGGT GAGATGCAGG
901 TGAAGCAGGG TCATGGGAAA TTTGAACACT CTGAGCTGGC CCTGTGACAG
951 ACTCCTGAGG ACAGCTGTCC TCTCCTACAT CTGGGATACA TCTCTTTGAA
1001 TTTGTCCTGT TTCGTTGCAC CAGCCCAGAT GTCTCACATC TGGCGGAAAT
1051 TGACAGGCCA AGCTGTGAGC CAGTGGGAAA TATTTAGCAA ATAATTTCCC
1101 AGTGCGAAGG TCCTGCTATT AGTAAGGAGT ATTATGTGTA CATAGAAATG
1151 AGAGGTCAGT GAACTATTCC CCAGCAGGGC CTTTTCATCT GGAAAAGACA
1201 TCCACAAAAG CAGCAATACA GAGGGATGCC ACATTTATTT TTTTAATCTT
1251 CATGTACTTG TCAAAGAAGA ATTTTTCATG TTTTTCAAA GAAGTGTGTT

FIG. 4A

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1301 TCTTTCCTTT TTTAAAATAT GAAGGTCTAG TTACATAGCA TTGCTAGCTG
1351 ACAAGCAGCC TGAGAGAAGA TGGAGAATGT TCCTCAAAAT AGGGACAGCA
1401 AGCTAGAAGC ACTGTACAGT GCCCTGCTGG GAAGGGCAGA CAATGGACTG
1451 AGAAACCAGA AGTCTGGCCA CAAGATTGTC TGTATGATTC TGGACGAGTC
1501 ACTTGTGGTT TTTACTCTCT GGTTAGTAAA CCAGATAGTT TAGTCTGGGT
1551 TGAATACAAT GGATGTGAAG TTGCTTGGGG AAAGCTGAAT GTAGTGAATA
1601 CATTGGCAAC TCTACTGGGC TGTTACCTTG TTGATATCCT AGAGTTCTGG
1651 AGCTGAGCGA ATGCCTGTCA TATCTCAGCT TGCCCATCAA TCCAAACACA
1701 GGAGGCTACA AAAAGGACAT GAGCATGGTC TTCTGTGTGA ACTCCTCCTG
1751 AGAAACGTGG AGACTGGCTC AGCGCTTTGC GCTTGAAGGA CTAATCACAA
1801 GTTCTTGAAG ATATGGACCT AGGGGAGCTA TTGCGCCACG ACAGGAGGAA
1851 GTTCTCAGAT GTTGCATTGA TGTAACATTG TTGCATTTCT TTAATGAGCT
1901 GGGCTCCTTC CTCATTTGCT TCCCAAAGAG ATTTTGTCCC ACTAATGGTG
1951 TGCCCATCAC CCACACTATG AAAGTAAAAG GGATGCTGAG CAGATACAGC
2001 GTGCTTACCT CTCAGCCATG ACTTTCATGC TATTAAAAGA ATGCATGTGA
2051 A

FIG. 4B

Wild Type Amino Acid Sequence for CD83 protein [Mus musculus]

MSQGLQLLFL GCACSLAPAM AMREVTVACS ETADLPCTAP WDPQLSYAVS
WAKVSESGTE SVELPESKQN SSFEAPRRRA YSLTIQNTTI CSSGTYRCAL
QELGGQRNLS GTVVLKVTGC PKEATESTFR KYRAEAVLLF SLVVFYLTLI
IFTCKFARLQ SIFPDISKPG TEQAFLPVTS PSKHLGPVTL PKTETV

Mutant CD83 Amino Acid Sequence: novel tail underlined, in bold.

MSQGLQLLFL GCACSLAPAM AMREVTVACS ETADLPCTAP WDPQLSYAVS
WAKVSESGTE SVELPESKQN SSFEAPRRRA YSLTIQNTTI CSSGTYRCAL
QELGGQRNLS GTVVLKVTGC PKEATESTFR KYRAEAVLLF SLVVFYLTLI
IFTCKFARLQ SIFPDISKPG TEQAFLPVTS PSKHLGPVTL PKTETV**RVGS**
PLVFTKPAH QISVPECHPD KRRMSSILRW QPFFEVLHLT VGSTLLPDTG

S

FIG. 5

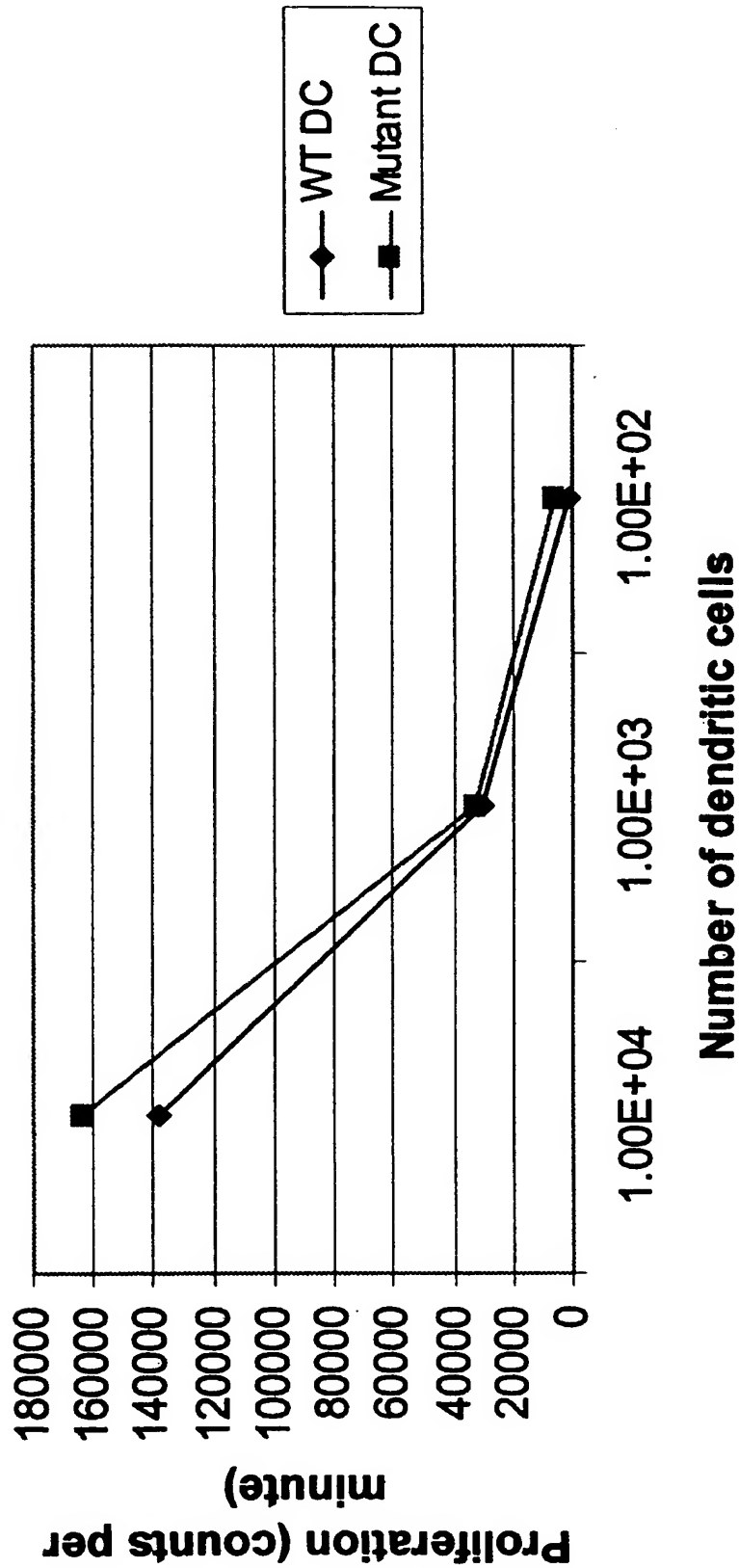


FIG. 6A

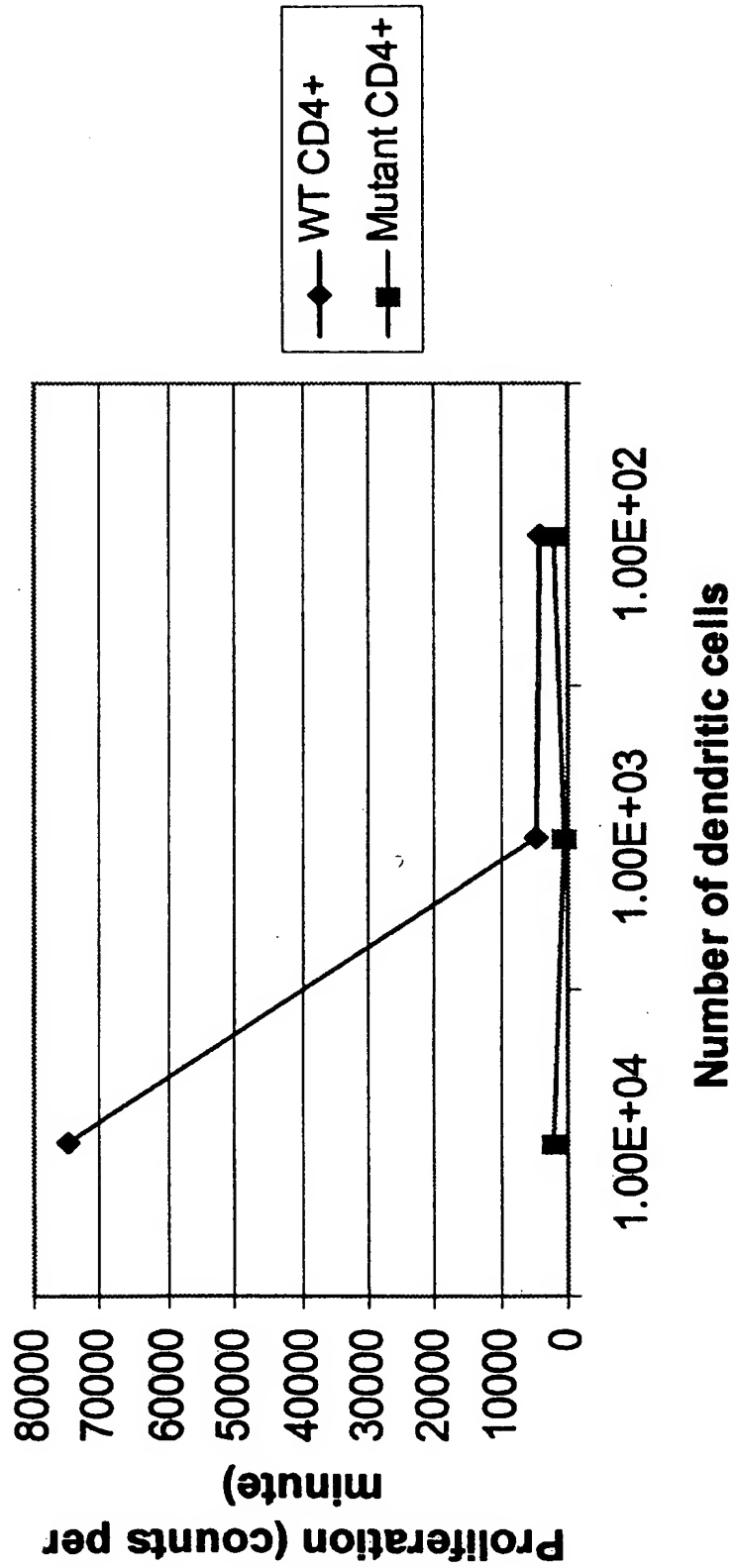


FIG. 6B

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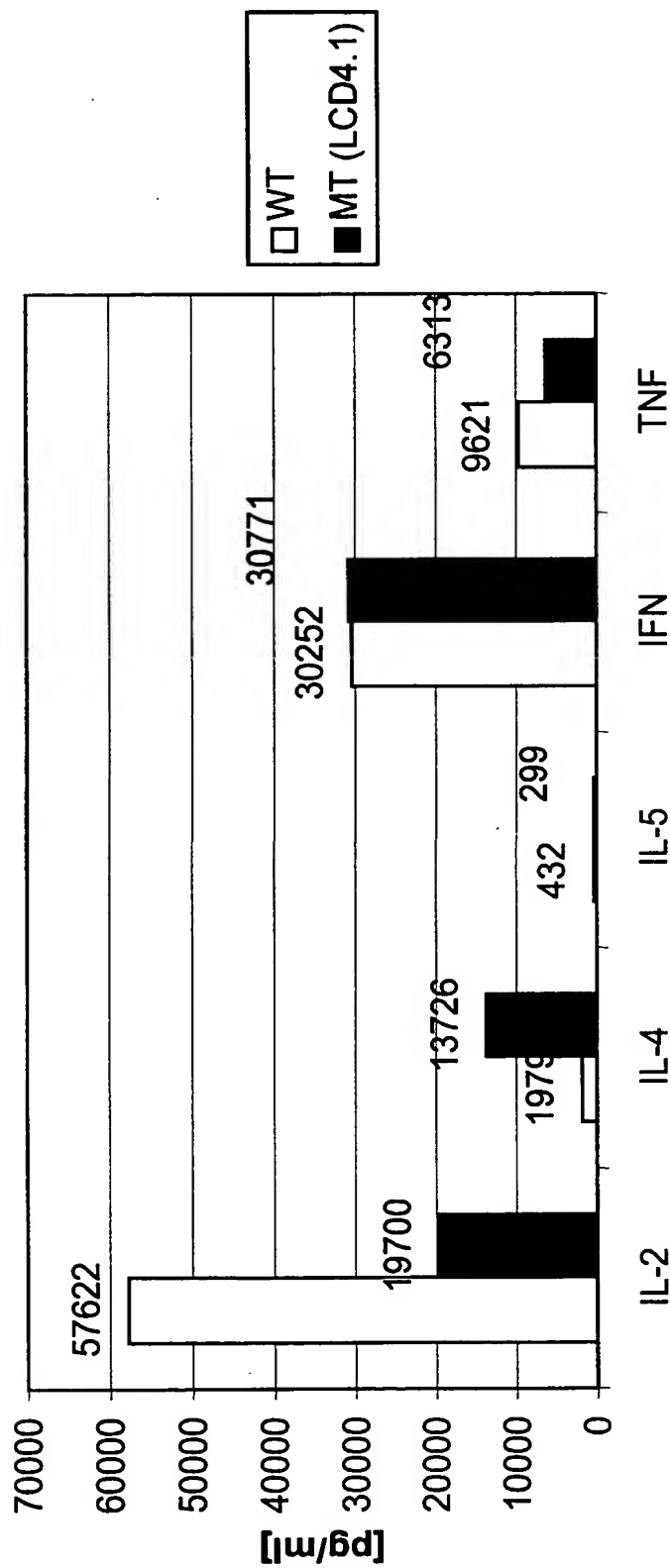


FIG. 7

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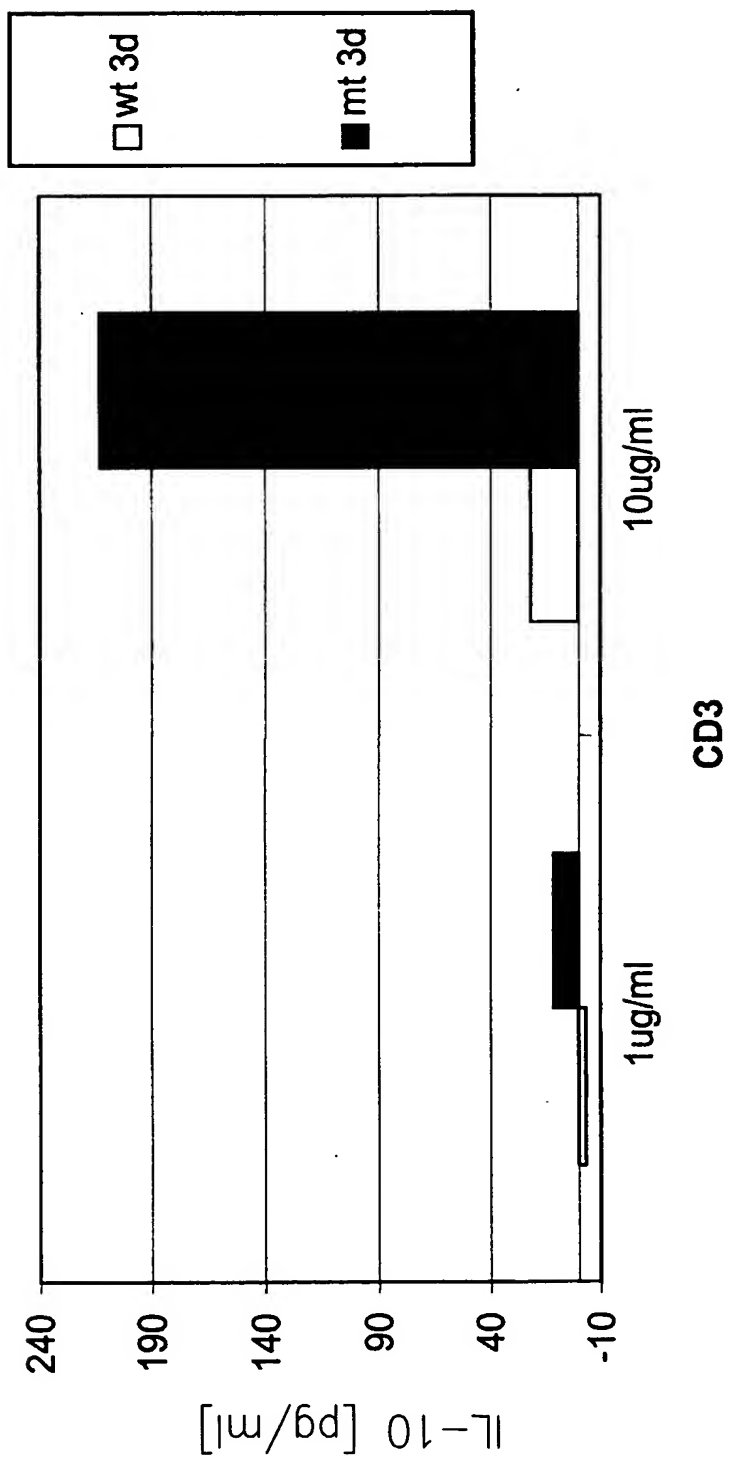


FIG. 8

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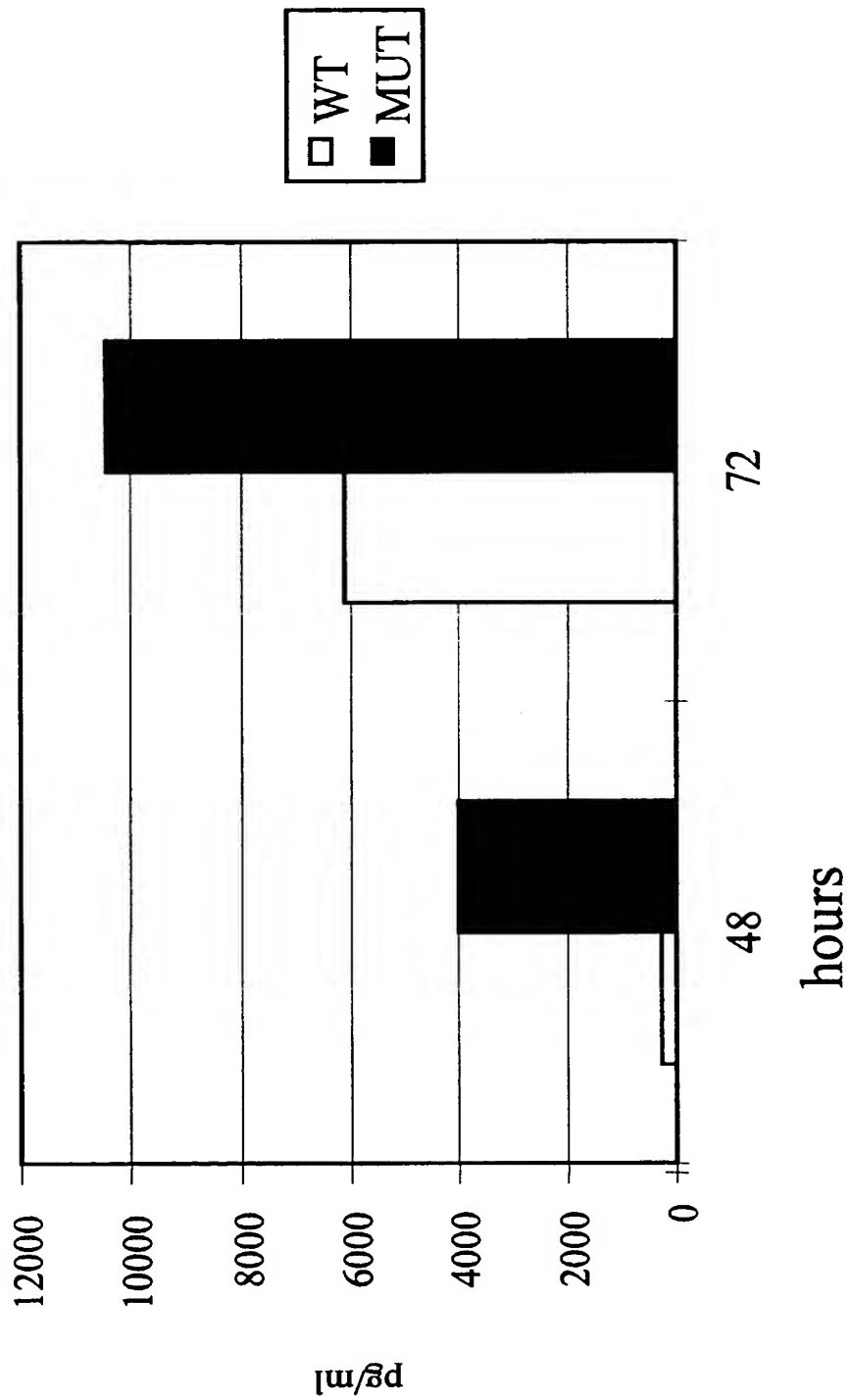


FIG. 9

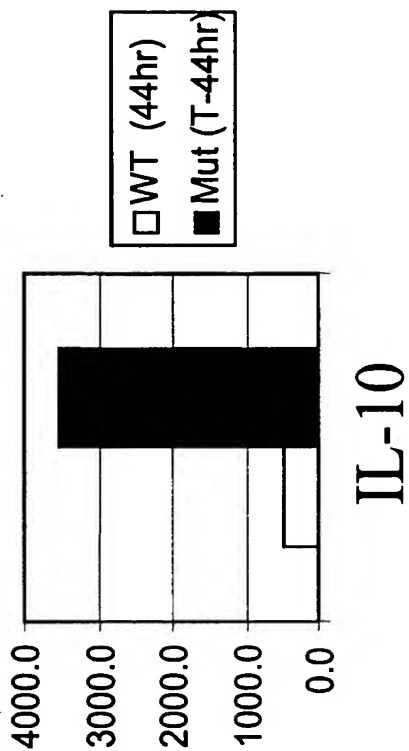


FIG. 10B

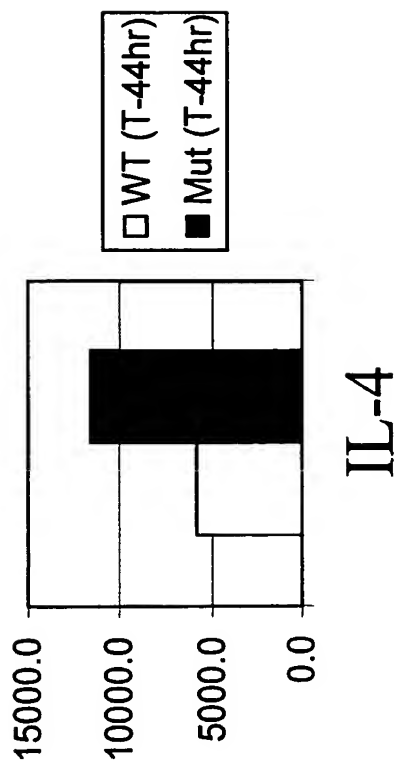


FIG. 10A

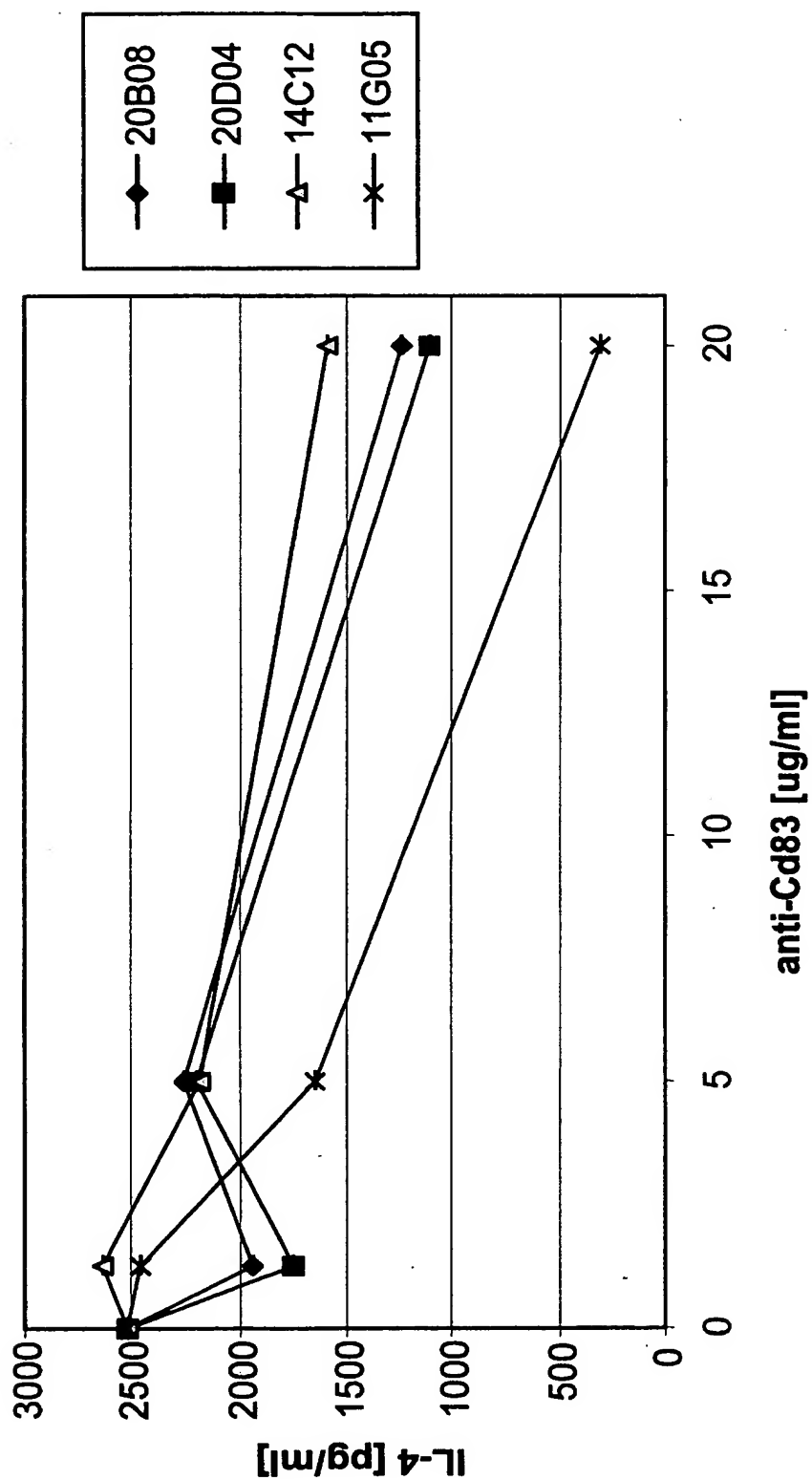


FIG. 11

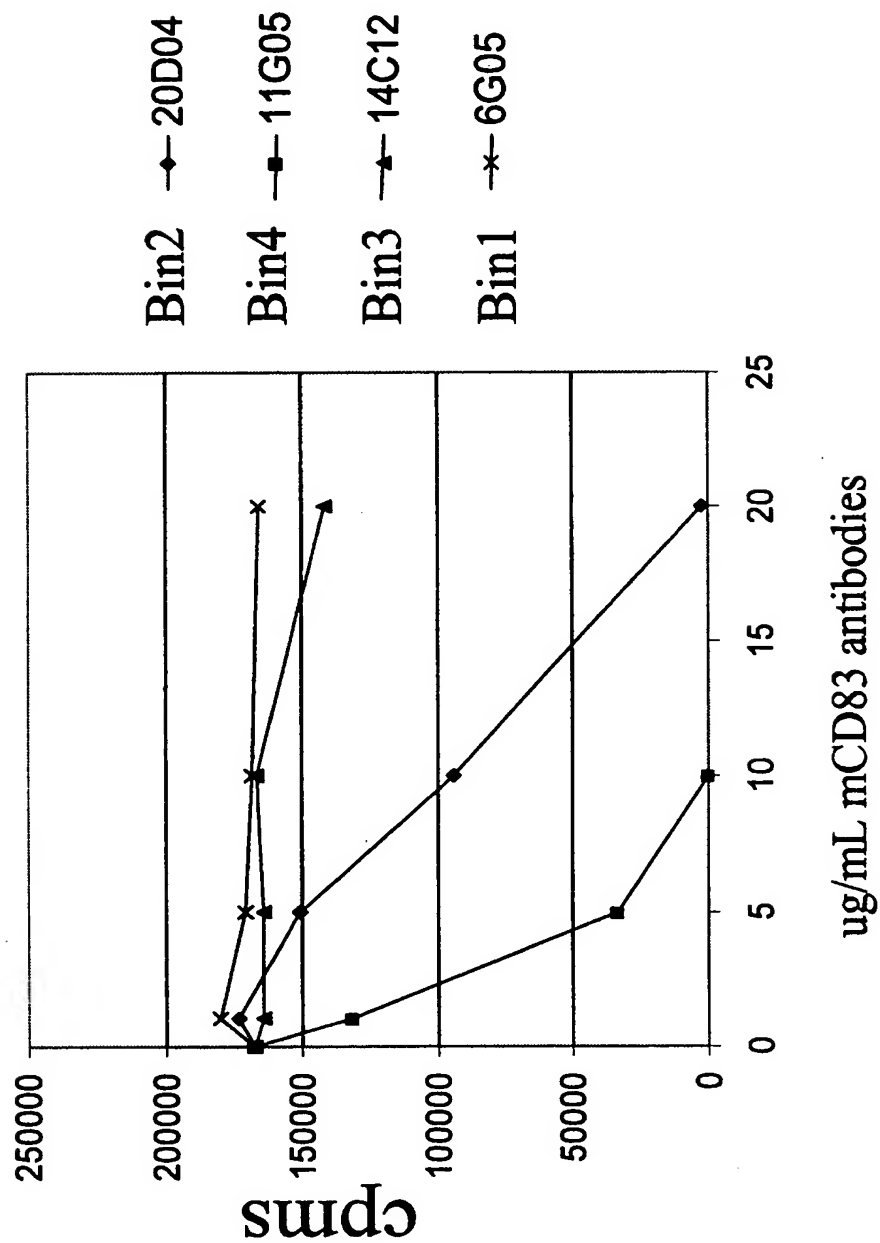


FIG. 12

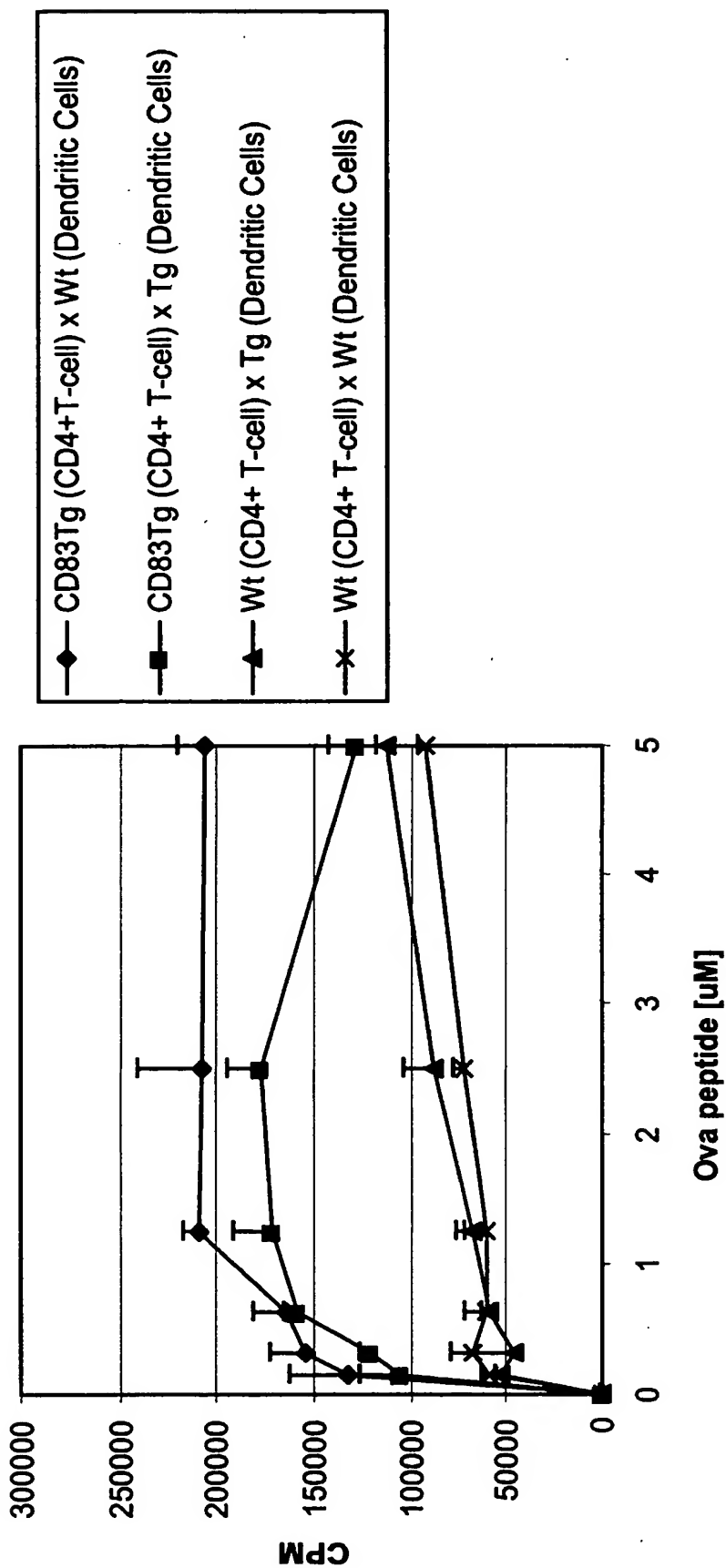


FIG. 13

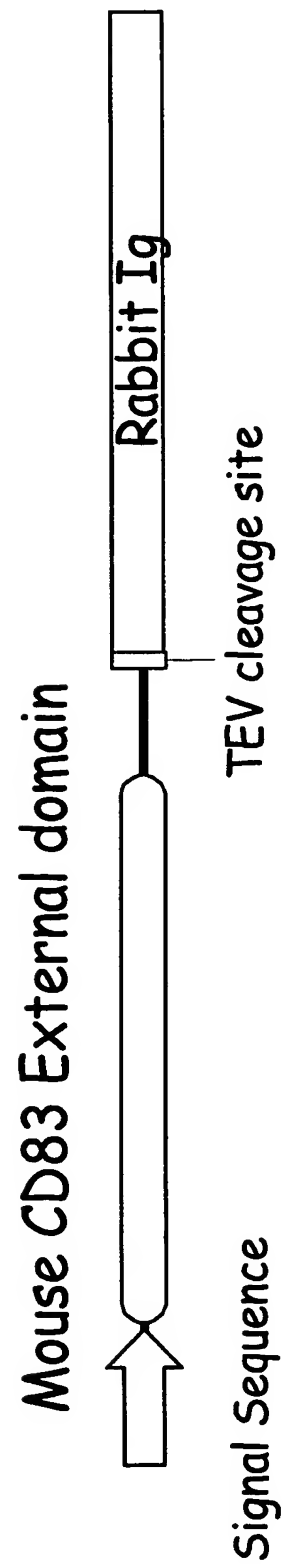


FIG. 14

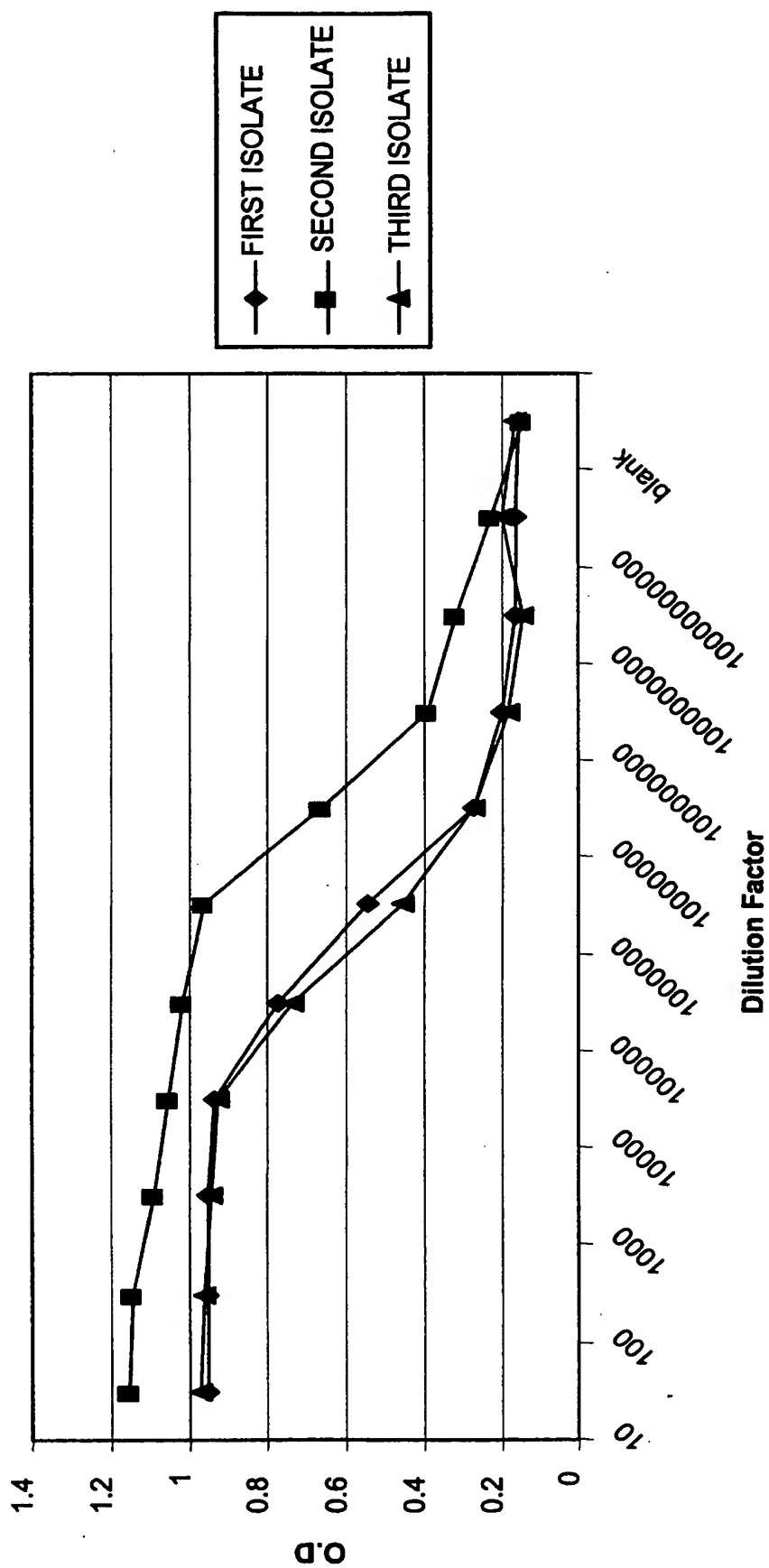


FIG. 15

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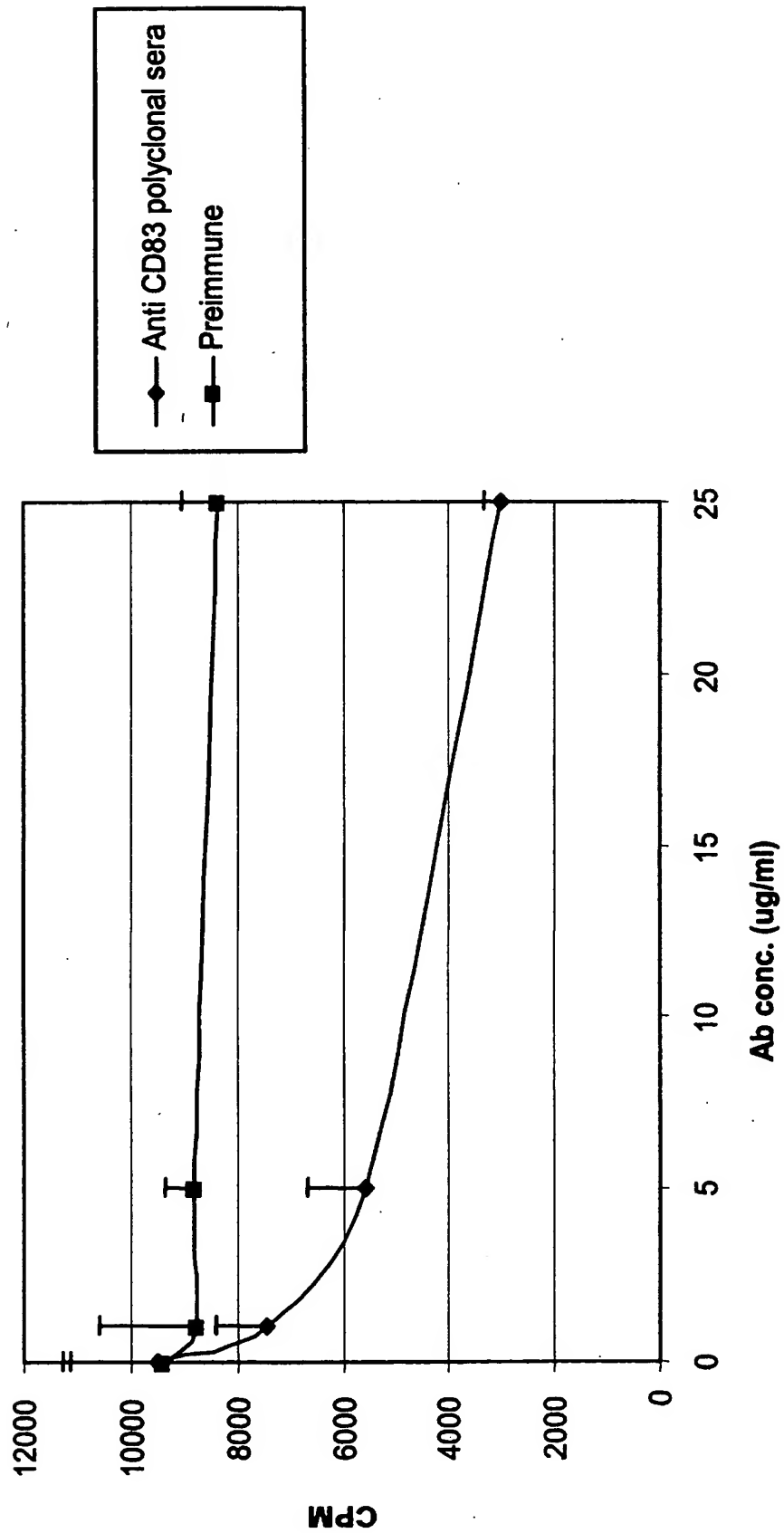


FIG. 16

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	CDR1	CDR2
20B08H	METGLRWLLLVAVLKGVCQCSVEESGGRLVTPGTPLTLTCTVSGFSLSSYDMTWVRQAPGKGLEWIGIIYAS-	
6G05H	METGLRWLLLVAVLKGVCQCSVEESGGRLVSPGTPLTLTCTASGFSLSSYDMSWVRQAPGKLEYIGIISSS-	
20D04H	METGLRWLLLVAVLKGVCQCSVEESGGRLVTPGTPLTLTCTVSGFSLSSYDMSWVRQAPGKLEWIGIIYAS-	
11G05	METGLRWLLLVAVLKGVCQCSVEESGGRLVTPGTPLTLTCTVSGFTISDYDLISWVRQAPGEGLYIGFIAID-	
14C12	METGLRWLLLVAVLKGVHCQCSVEESGGRLVTPGTPLTLTCTASGFSRSSYDMSWVRQAPGKLEWVGVI STA-	
	CDR3	
20B08H	GSTYYASWAKGRFTISKSTTTVDLEVTSLTTEDTATYFCSRHAGYSGDTGHLWGPGLTVTVSSGQPKAPSVF	
6G05H	GTTYANWAKGRFTISKSTTTVDLKVTSPTIGDTATYFCAREGAGVSMT---LWGPGLTVTVSSGQPKAPSVF	
20D04H	GSTYYASWAKGRVAISKSTTTVDLKITSPPTEDTATYFCAREDAGFSNA---LWGPGLTVTVSSGQPKAPSVF	
11G05	GNPYYATWAKGRFTISKSTTTVDLKITAPTTEDTATYFCARGAGD-----LWGPGLTVTVSSGQPKAPSVF	
14C12	YNSHYASWAKGRFTISRTSTTTVDLKMVTSLTTEDTATYFCARGGSWLD-----LWQQGLTVTVSSGQPKAPSVF	
20B08H	PLAPCCGDTTPSS	
6G05H	PLAPCCGDTTPSS	
20D04H	PLAPCCGDTTPSS	
11G05	PLAPCCGDTTPSS	
14C12	PLAPCCGDTTPSS	

FIG. 17A

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	CDR1	CDR2	CDR3
20B08L	MDMRAPTQLLGLLLWLP	GARC-AYDMTQTPASVEVAVGGT	VTIKCQASQSI
6G05L	MDMRAPTQLLGLLLWLP	GARC-AYDMTQTPASVEVAVGGT	VAIKCQASQSV
20D04L	MDMRAPTQLLGLLLWLP	GARCADVVM	TQTPASVSAAVGGT
11G05L	MDTRAPTQLLGLLLWLP	GARCADVVM	TQTPASVSAAVGGT
14C12L	MDXRAPTQLLGLLLWLP	GARCA-LVMTQTPASVSAAVGGT	VTINCQSSQSVYD
20B08L	LDWYQQKPGQPPKLLIYDASDLASGVPSR	FKGSGSGTG	FTLTISDLECADAA
6G05L	LAWYQQKPGQPPKPLIYEASMLAAGVSSR	FKGSGSGTDF	TLTISDLECD
20D04L	LSWYQQKPGQPPKLLIYRTSTLASGVSSR	FKGSGSGTEY	TLTISGVQCDD
11G05L	LSWFQQKPGQPPKLLIYYASTLASGVPSR	FRGSGSGTG	FTLTISDVQCDD
14C12L	LSWYQQKPGQPPKLLIYLASKLASGVPSR	FKGSGSGTG	QFALTISGVQCDD
20B08L	-HSNV	DNVFGGTEVVVK	GDVPVPTVLLFP
6G05L	-ISD	IDNAFGGGTEVVVK	GDVPVPTVLLFP
20D04L	KFISD	GAAFGGTEVVVK	GDVPVPTVLLFP
11G05L	SDNG	FGGGTEVVVK	GDVPVPTVLLFP
14C12L	-WYLT	FGGGTEVVVK	GDVPVPTVLLFP

FIG. 17B

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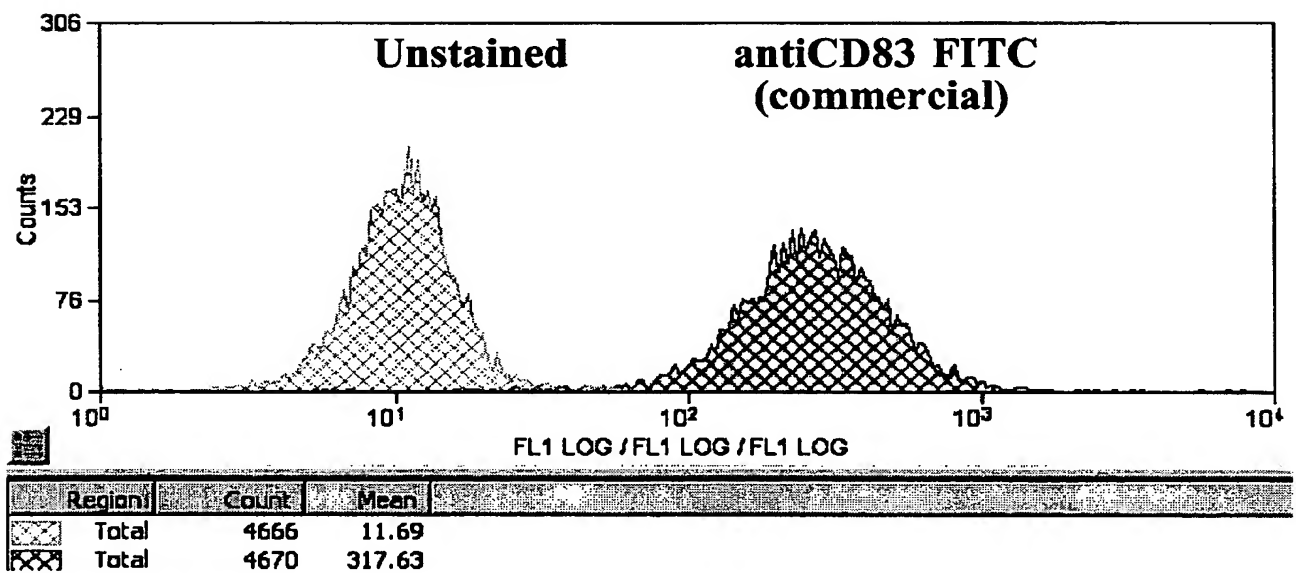


FIG. 18

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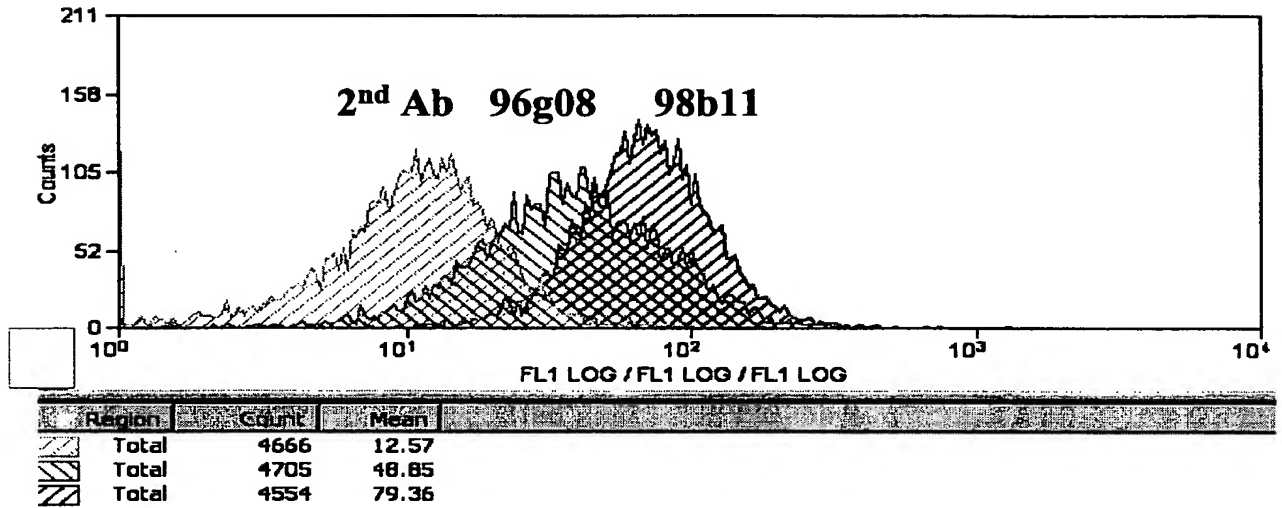


FIG. 19A

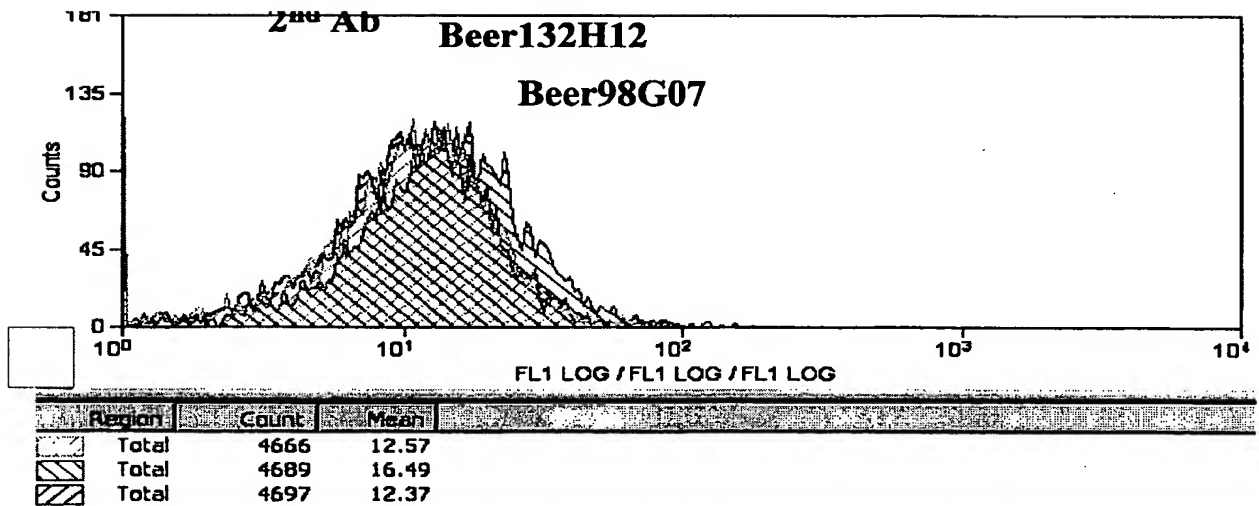


FIG. 19B

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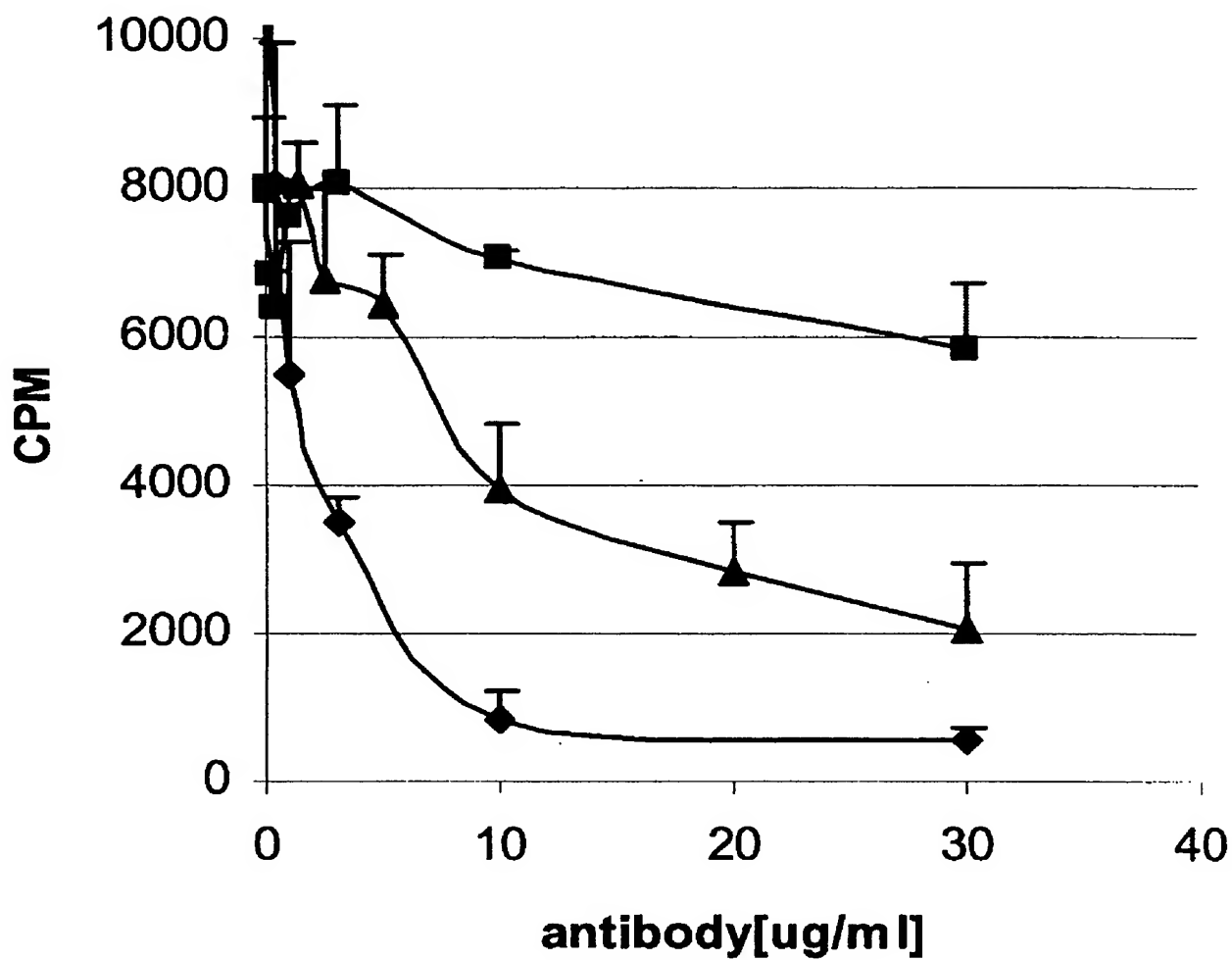


FIG. 20

DNA:

ATGACACAGGGCCCCACTCAGCTGCTGGGGCTCCTGCTGCTGCTGCCAGGTGCCACATTGCG
CAAGTGCTGACCCAGACTGCATCGCCCGTGTCTGCACCTGTGGAGGCACAGTCACCATCAATTGCCA
GTCCAGTCAGAGTGTATATAACGACTTCTTATCCTGGTATCAGCAGAAACCAGGCAGCCTCCCAA
ACTCCTGATCTATTATGCATCCACTCTGGCATCTGGGGTCCCATCCCGTTCAAGGCAGTGGATCTGG
GACACAGTTCACCTCACCATCAGCGACCTGGAGTGTACGATGCTGCCACTTACTACTGTACAGGCA
CTTATGGTAATAGTGCTTGGTACGAGGATGCTTTCGGCGGAGGACCGAGGTGGTGTCAACGTACG
CCAGTTGCACCTACTGCTCCTCTTCCCAACCATCTAGCGCTGAGCTGGCAACTGGAACAGCCACCATC
GTGTGCGTGCGGAATAATACTTTCCCGATGGCACCGTCACTGGAGGTGGATGGCATCACCCAAAG
CAGCGGCATCAATAACAGTAGAACACCGCAGAAATTCTGCAGATTGTACCTACAACCTCAGCAGTACTC
TGACACTGAGCAGCAGAGTACAACAGCCACGACGAGTACACCTGCCAGGTGGCCACGAGTCTCAGG
CTCACCGTGCTCCAGAGCTTCAGTAGGAAGAGCTGTAG

Protein:

MDTRAPTQLGLLLWLPGATFAQVLQTASPVSAPVGGTVTINCQSSQSVYNNDFLSWYQQKPGQPPK
LLIYYASTLASGVPSRFKGSFGTQFTLTISDLECDAAATYYCTGTYGNSAWYEDAFGGGTEVVVKRTPV
APTVLLFPSSAELATGTATIVCVANKYFPDGTVTWKVDGITQSSGINNSRTPQNSADCTYNLSSTLTSSD
EYNSHDEYTCQVAQDSGSPVVQSFSRKSC

FIG. 21

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DNA:

ATGGAGACTGGGCTGGCTTCTCCTGGTCGCTGTGCTCAAAGGTGTCCAGTGTCAAGGTGAGGAGTCCGGGGTGCCTGGTCACACCTGG
GACACCCCTGACACTCACTGACAGTGTCTGGAATCGACCTCAGTAGCGATGGAATAAGCTGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAATGG
ATCGGAATCATTAGTAGTGGTGAACACATACTACGCGAGCTGGGCAAAAGGCCGATTCAACCATCTCCAGAACTCGAACCCACGGTGGATCTGAAGAT
GACCACTCTGACAAACCGAGGACACGGCCACCTATTTCTGTGCCAGAGTTGTTGGTACTTATAGCATCTGGGGCCAGGGCACCCCTCGTCAACCGTCTC
GAGCGCTTCTACAAAGGGCCCATCTGTCTATCCACTGGCCCTGGATCTGTGCCCCAACTAACTCCATGGTGAACCTGGATGCCCTGGTCAAGGGCTA
TTTCCCTGAGCCAGTGACAGTGACCTGGAACTCTGGATCCCTGTCCAGCGGTGTGCACACCTTCCAGCTGCTCTGCACTGACCTCTACACTCTGAGC
AGCTCAGTGACTGTCCCTCCAGCACTGGGCCAGCGAGACCGTCACTGCAACCGTTGCCAACCGGCCAGCACCAAGGTGGACAAGAAATTTGT
GCCAGGGATTGTGGTTGTAAAGCCTTGCAATGTACAGTCCAGAAATATCATCTGTCTTCACTTCCCCCAAGCCCAAGGATGTGCTCACCATTACT
CTGACTCCTAAGGTCACTGTGTGTGTAGACATCAGCAAGGATGATCCCGAGGTCCAGTTCAGCTGGTTGTAGATGATGTGGAGGTGCACACAGC
TCAGACGCAACCCCGGAGGAGCAGTTCAACAGCACTTTCGGCTCAGTCAGTGAACTTCCCATCATGCACCAAGACTGGCTCAATGGCAAGGAGTTCA
AATGCAGGTCAACAGTGACGCTTCCCTGCCCCCATCGAGAAACCATCTCCAAACCAAGGCAGACCCGAAAGGCTCCACAGGTGTACACCATTTCCA
CCTCCCAAGGAGCAGATGGCCAAAGGATAAAGTCAGTCTGACCTGCATGATAACAGACTTCTCCCTGAAGACATTACTGTGAGTGGCAGTGGAATGG
GCAGCCAGCGGAGAACTACAAGAACTCAGGCCATCATGGACACAGATGGCTCTTACTTCGTCTACAGCAAGCTCAATGTGCAGAAAGAGCAACTGG
GAGGCAGGAATACTTTCACCTGCTGTGTTACATGAGGGCCTGCACAAACCATACTGAGAAAGAGCCTCTCCCACTCTCCTGGTAAATGA

Protein:

METGLRWLLLVAVLKGVCQCSVEESGGRLVTPGTPLTLTCTVSGIDLSSDGISWVRQAPKGLEWIGIIS
SGGNTYYASWAKGRFTISRSTTVDLKMTSLTTEDTATYFCARVVGITYSIWQQGLVTVSSASTKGPS
VYPLAPGSAAQTNMVTLGCLVKGYFPEPVTVTWNSGSLSSGVHTFPAVLQSDLYTLSSSVTPSSTWPS
ETVTCNV AHPASSTKVDDKKIVPRDCGCKPCICTVPEVSSVFIFPPKPKDVL TITLTPKVTCVVVDISKDDPE
VQFSWFVDDVEVHTAQTQPREEQNSTFRSVSELPIMHQDWLNGKEFKCRVNSAAFPAPIEKTISKTKGR
PKAPQVYTIPPPKEQMAKDKVSLTCMITDFFPEDITVEWQWNGQPAENYKNTQPIMDTDGSYFVYSKLN
VQKSNWEAGNTFTCSVLHEGLHNHHTEKSLSHSPGK

FIG. 22

DNA:

ATGGACAGAGGCCCCCACTCAGCTGCTGGGGCTCCTGCTGCTGCTGCCAGGTGCCACATTTGCCC
AAGCCGTGGTGACCCAGACTACATCGCCCGTGTCTGCACCTGTGGGAGGCACAGTCACCATCAATTGCCA
GTCCAGTCAGAGTGTTATGGTAACAACGAATTATCCTGGTATCAGCAGAAACCCAGGCAGCCTCCCAAG
CTCCTGATCTACAGGCATCCAGCCTGGCATCTGGGGTCCCATCGCGGTTCAAAGGCAGTGGATCTGGGA
CACAGTTCACCTCACCATCAGCGACCTGGAGTGTGACGATGCTGCCACTTACTACTGTCTAGCGAATAT
AGCATTAGTGTGATAATCATTTTCGGCGGAGGACCGAGGTGGTGTCAAACGTACGCCAGTTGCACCTA
CTGTCCTCCTCTTCCCACCATCTAGCGCTGAGCTGGCAACTGGAACAGCCACCATCGTGTGCGTGGCGAAT
AAATACTTTCCCGATGGCACCCGTACCTGGAGGTGGATGGCATCACCCCAAGCAGCGCATCAATAACA
GTAGAACACCGCAGAAATTCTGCAGATTGTACCTACAACCTCAGCAGTACTCTGACACTGAGCAGCGACGA
GTACAACAGCCACGACGAGTACACCTGCCAGGTGGCCCAAGGACTCAGGCTCACCGGTCGTCCAGAGCTTC
AGTAGGAAGAGCTGTTAG

Protein:

MDTRAPTQLLGLLLWLPGATFAQAVVTQTTPVSA PVGGTVTINCSSQSVYGNNELSWYQQKPGQPP
KLLIYQASSLASGVPSRFKGSQGTQFTLTISDLECDAA TYYCLGEYSISADNHFGGGTEVVVKRTPVAP
TVLLFPSSAELATGTATIVCVANKYFPDGTVTWKVDGITQSSGINNSRTPQNSADCTYNLSSTLTLSSDEY
NSHDEYTCQVAQDSGSPVVQSF SRKSC

FIG. 23

DNA:

ATGGAGACTGGGCTGCGTGGTTCTCCTGGTCGTCGTCTCAAAGGTGTCCAGTGCAGTCCGGTGGAGGAGTCCGGGGGTCCG
CTGGTACCGCTGGGACACCCCTGACACTCACCTGCACAGTCTCTGGAAATCGACCTCAGTAGCAATGCAATGATCTGGGTCCGC
CAGGCTCCAAGGAGGGGTGGAATGGATCGGAGCCATGGATAGTAATAGTAGGACGTACTACGGACCTGGGCGAAAGGCC
GATTCACCATCTCCAGAACCTCGTCGATTACGGTGGATCTGAAAATCACCAAGTCCGACAAACCGAGGACACGGCCACCTATTCT
GTGCCAGAGGGGATGGTGGCAGTAGTGATTATACAGAGATGTGGGGCCAGGACCCCTCGTCAACCGTCTCGAGCGCTTCTACA
AAGGCCCATCTGTCTATCCACTGGCCCCCTGGATCTGTGCCCAAACCTAACTCCATGGTGACCCCTGGGATGCCCTGTCAAGGC
TATTTCCCTGAGCCAGTGACAGTGACCTGGAACTCTGGATCCCTGTCCAGCGGTGTGCACACCTTCCCAGCTGTCTGCACTCT
GACCTCTACACTCTGAGCAGCTCAGTGACTGTCCCCCTCCAGCACCTGGCCCCAGCAGACCGTCACTGCAACGTTGCCCAACCCG
GCCAGCAGCACCAAGGTGGACAAGAAAATTGTGCCCAGGATTGTGGTTGTAAGCCTTGCCATATGTACAGTCCCAGAAATC
ATCTGTCTTCATCTTCCCCCAAAGCCAAAGGATGTGCTCACCATTACTCTGACTCCTAAGGTCACTGTGTGTGTGTAGACATC
AGCAAGGATGATCCCGAGTCCAGTTCAGCTGGTTGTAGATGATGTGGAGGTGCACACAGCTCAGACGCAACCCCGGAGGA
GCAGTTCAACAGCACTTCCGCTCAGTCAGTGAATCTCCCATCATGCACAGGACTGGCTCAATGGCAAGGAGTTCAAAATGCAG
GGTCAACAGTGCAGCTTCCCTGCCCTCCAGAAACCATCTCCAAACCAAGGACAGCCGAAGGCTCCACAGGTGTACA
CCATTCCACCTCCCAAGGAGCAGATGGCCAAAGGATAAAGTCAGTCTGACCTGCATGATAACAGACTTCTTCCCTGAAAGACATTA
CTGTGGAGTGGCAGTGGAATGGCAGCCAGCGGAGAACTACAAGAACACTCAGCCCATCATGGACACAGATGGCTCTTACTTC
GTCTACAGCAAGCTCAATGTGCAGAAAGCAACTGGGAGGCAGGAAATACTTTCACCTGCTCTGTGTACATGAGGGCCTGCA
CAACCACCATCTGAGAAAGCCTCTCCCACTCTCCTGGTAAATGA

Protein:

METGLRWLLLVAVLKGVQCQSVESGGRLVTPGTPLTLTCTVSGIDLSSNAMIWVRQAPREGLEWIGAMDSNSRYYATWA
KGRFTISRITSSITVDLKITSPTTETATYFCARGDGGSSDYTEMWGPGLVTVSSASTKGPSVYPLAPGSAAQTNSMVTLGCLV
KGYFPEPVTTWNSGSLSSGVHTFPAVLQSDLYTLSSSVTVPSSTWPSETVTCNV AHPASSTKVDDKKIVPRDCGCKPCICTVPE
VSSVFPPPKDKDLTITLTPKVTVCVVVDISKDDPEVQFSWFVDDVEVHTAQTQPREEQFNSTFRSVSELPIMHQDWLNGKEFK
CRVNSAAFPAPIEKTISKTKGRPKAPQVYTIPTPPKEQMAKDKVSLTCMITDFPEDITVEWQWNGQPAENYKNTQPIMDTDDGS
YFVYSKLNQKSNWEAGNTFTCSVLHEGLHNHHTEKSLSHSPGK

FIG. 24

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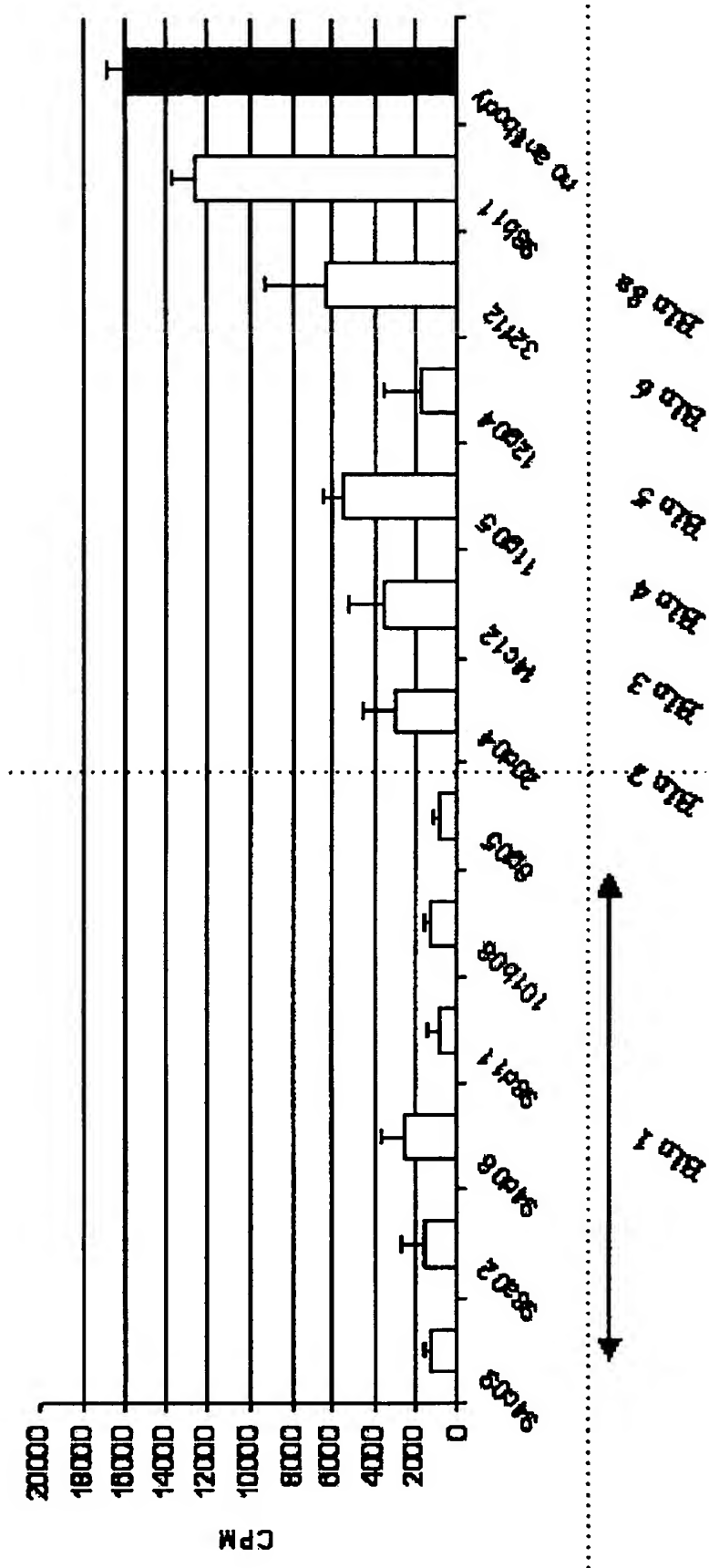


FIG. 25A

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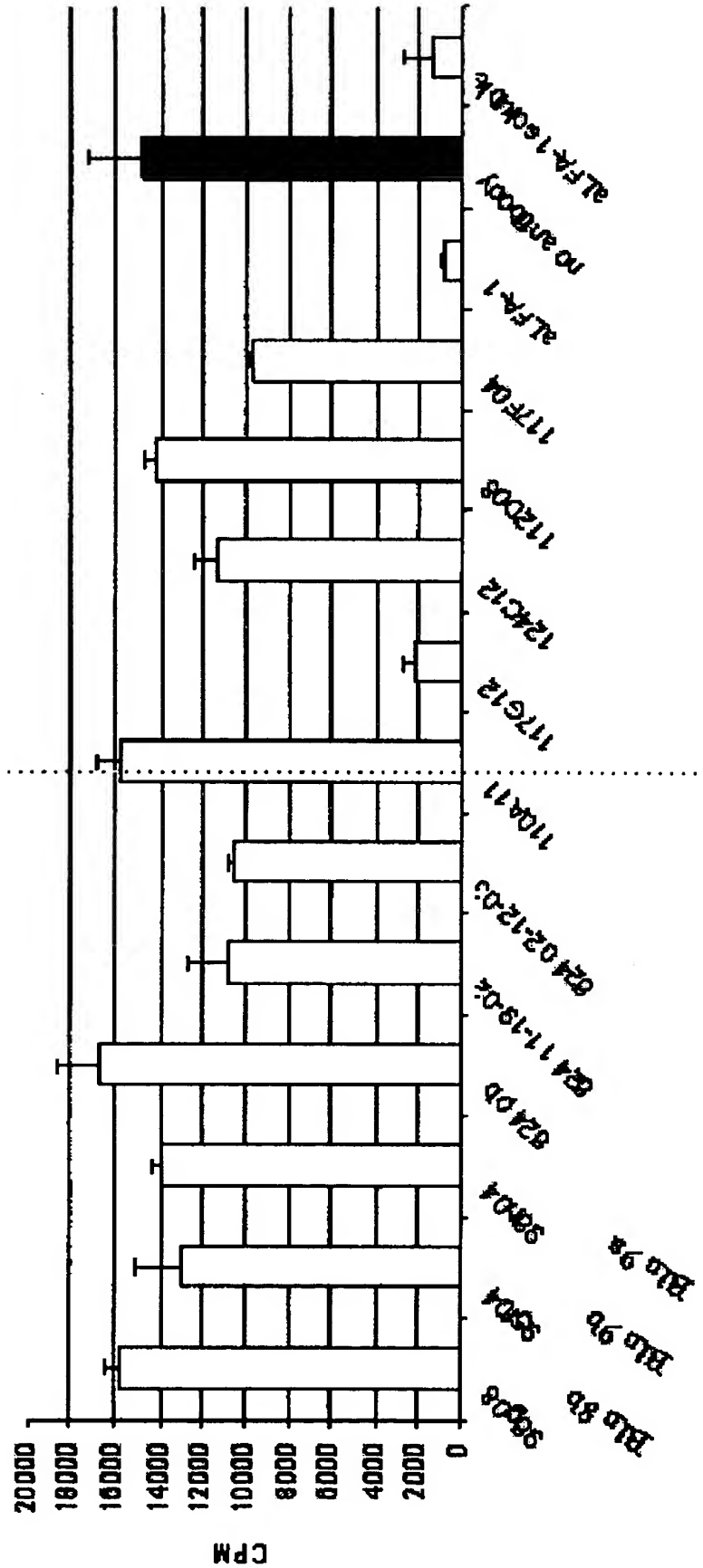


FIG. 25B

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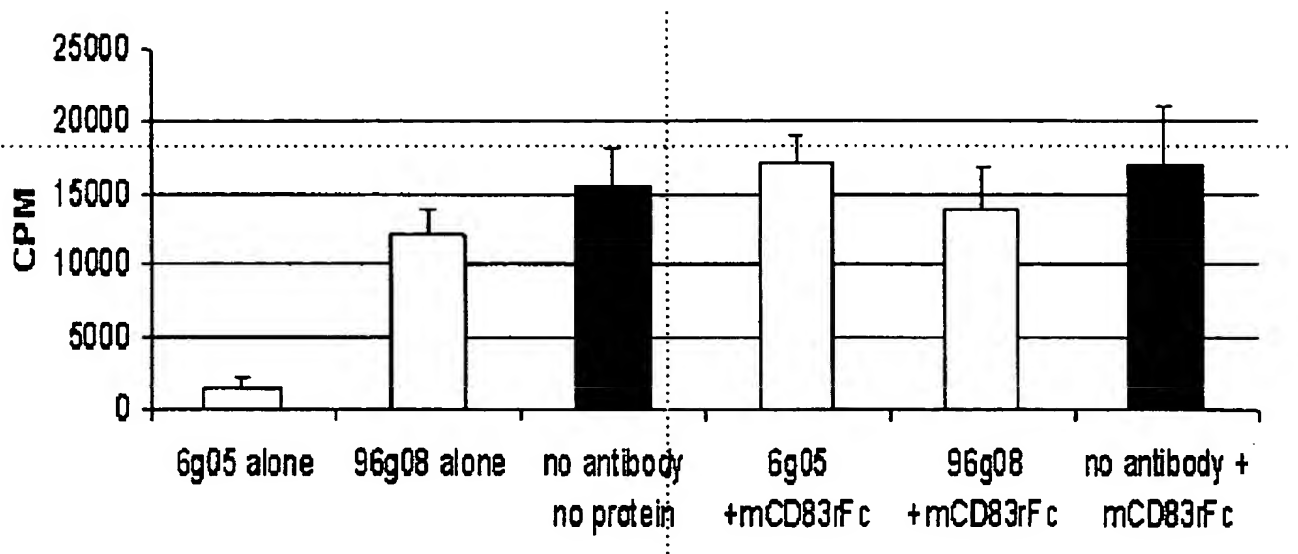


FIG. 26

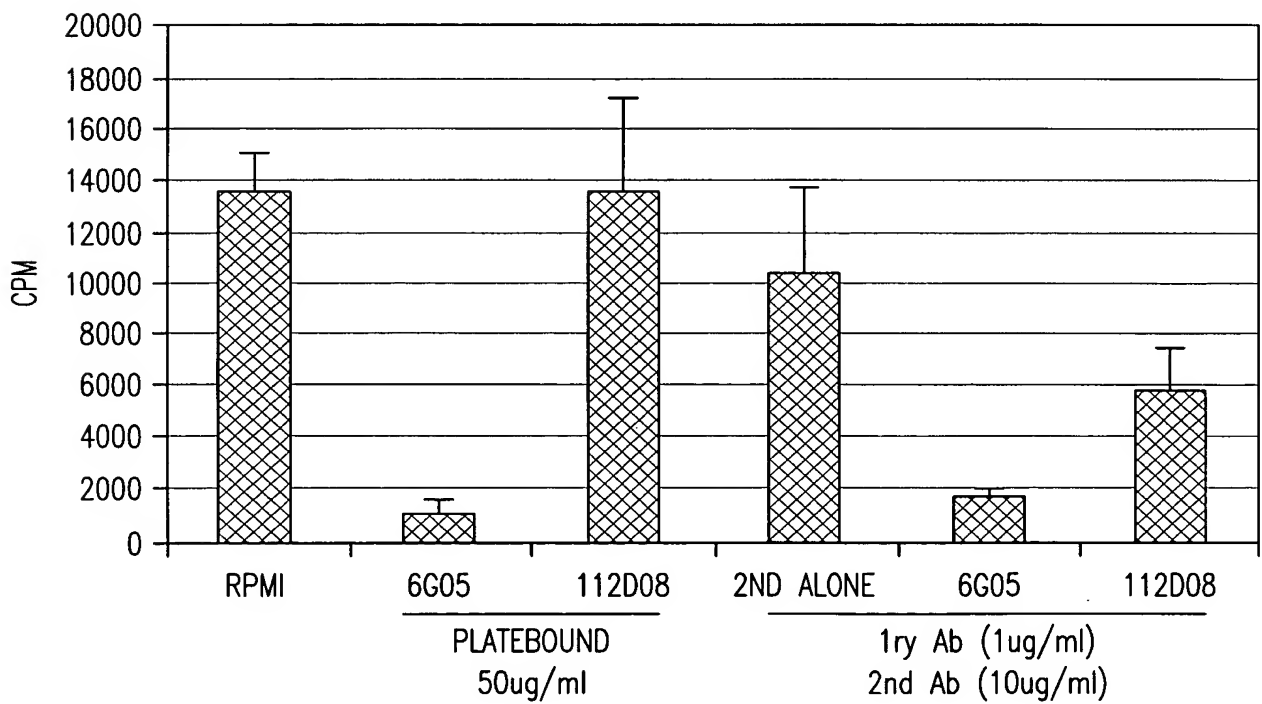


FIG. 27

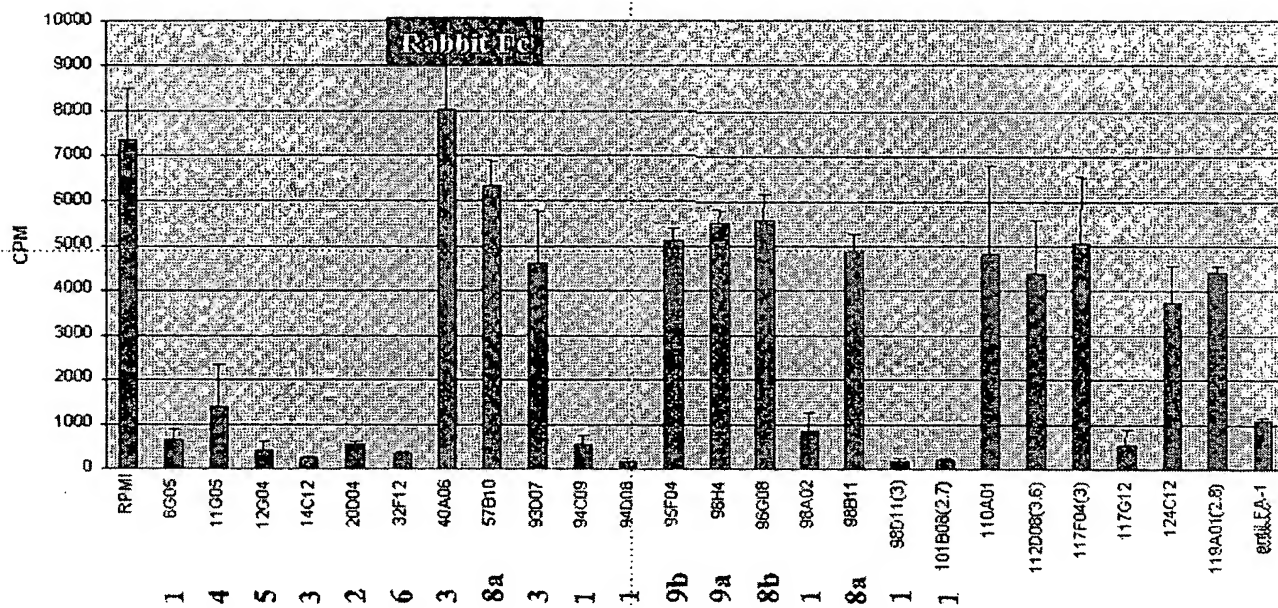


FIG. 28

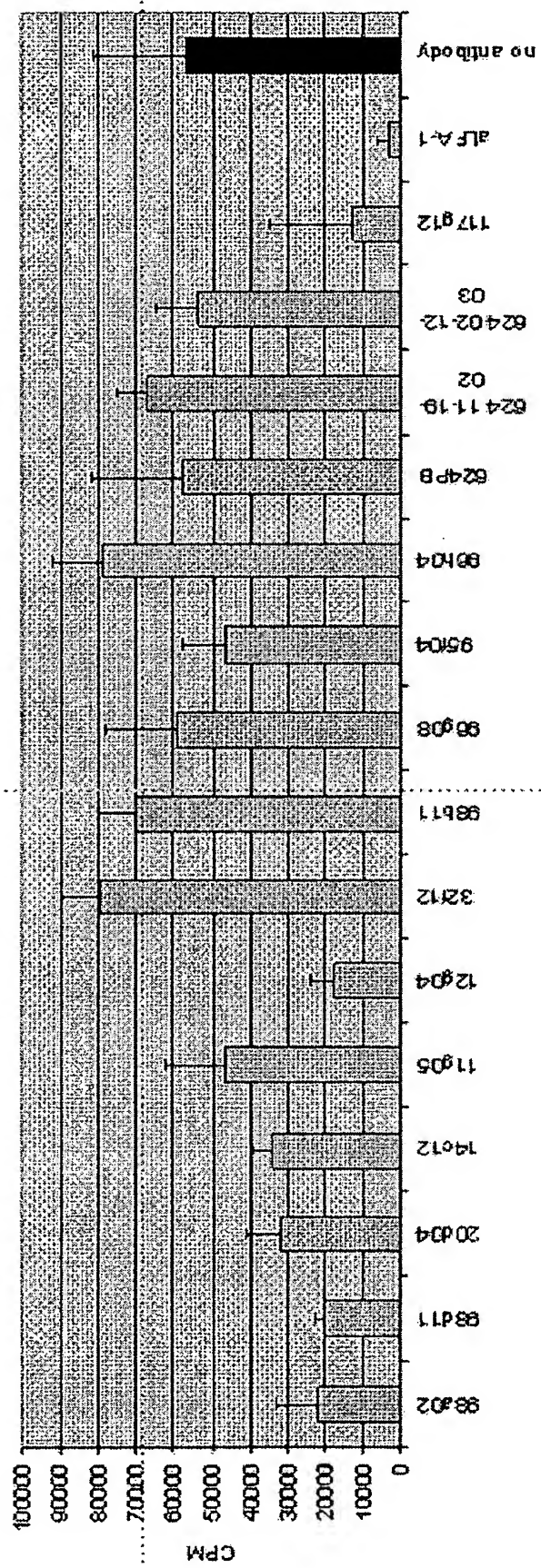


FIG. 29

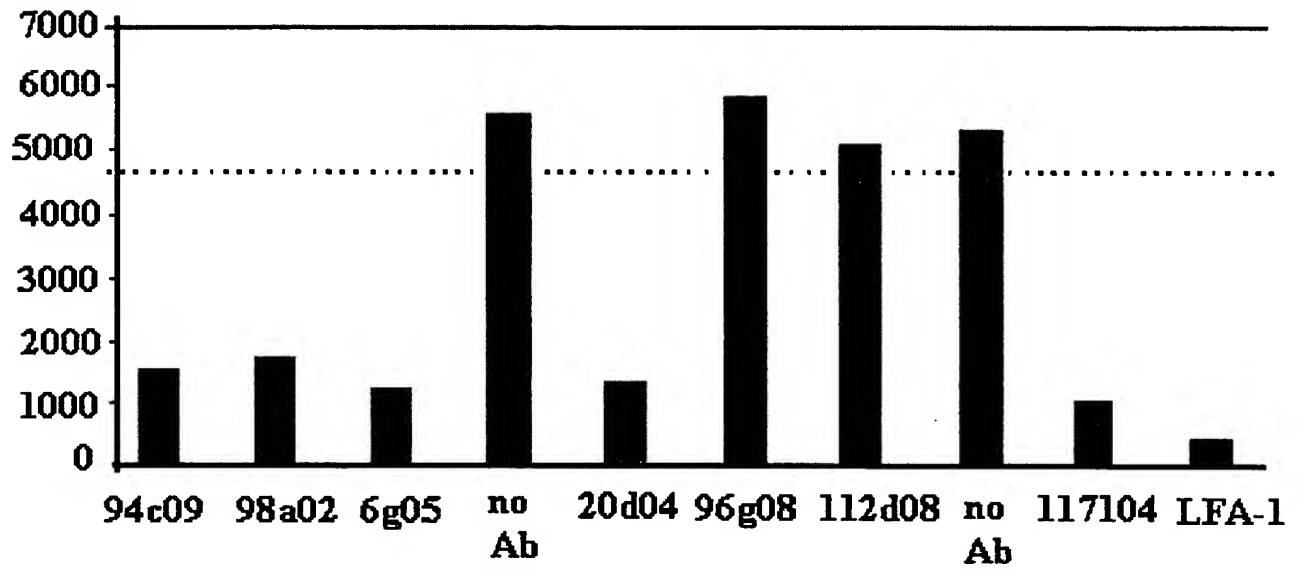


FIG. 30

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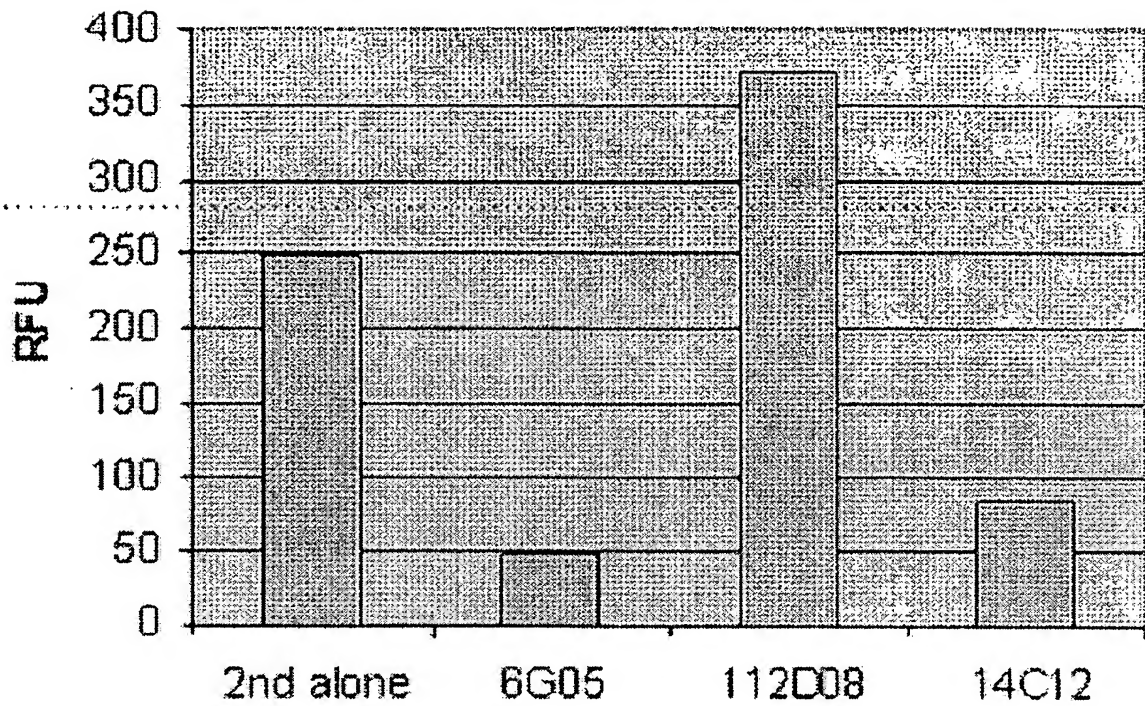


FIG. 31A

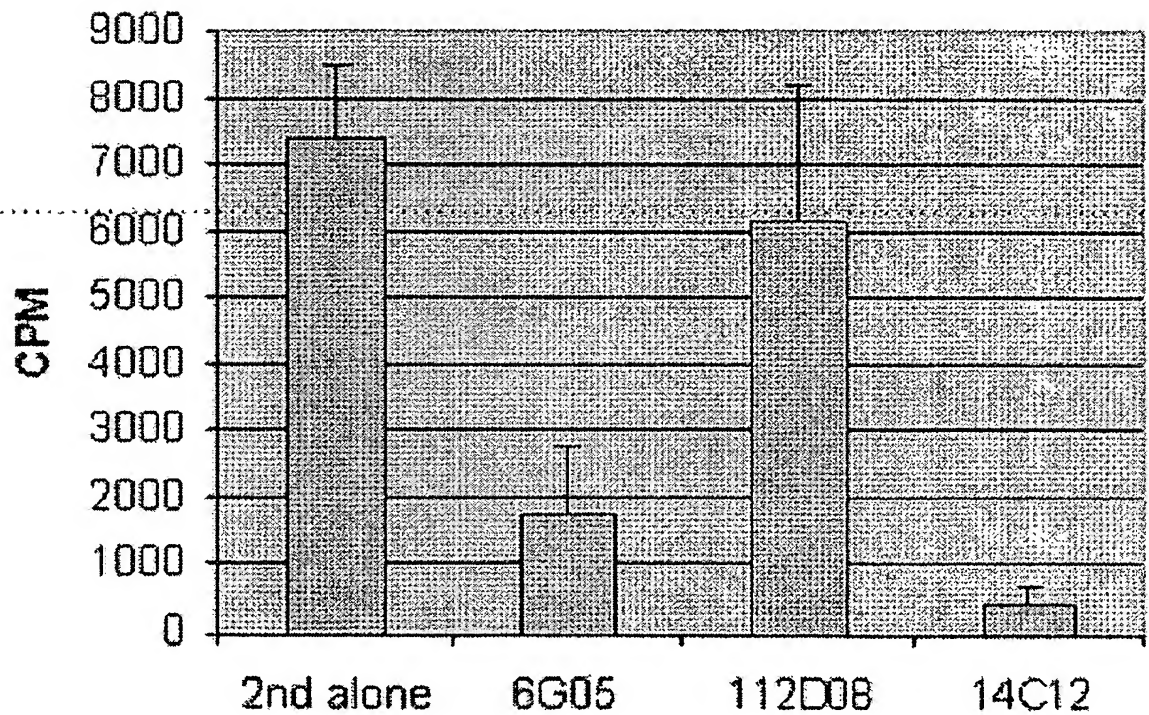


FIG. 31B

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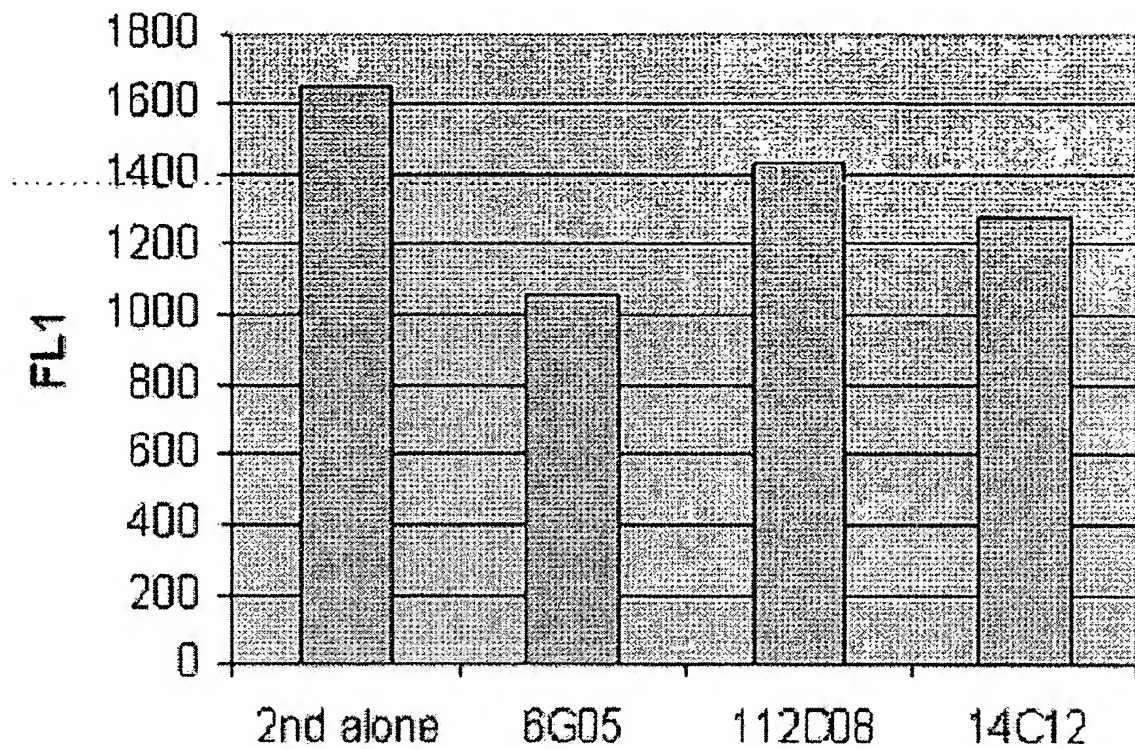


FIG. 32A

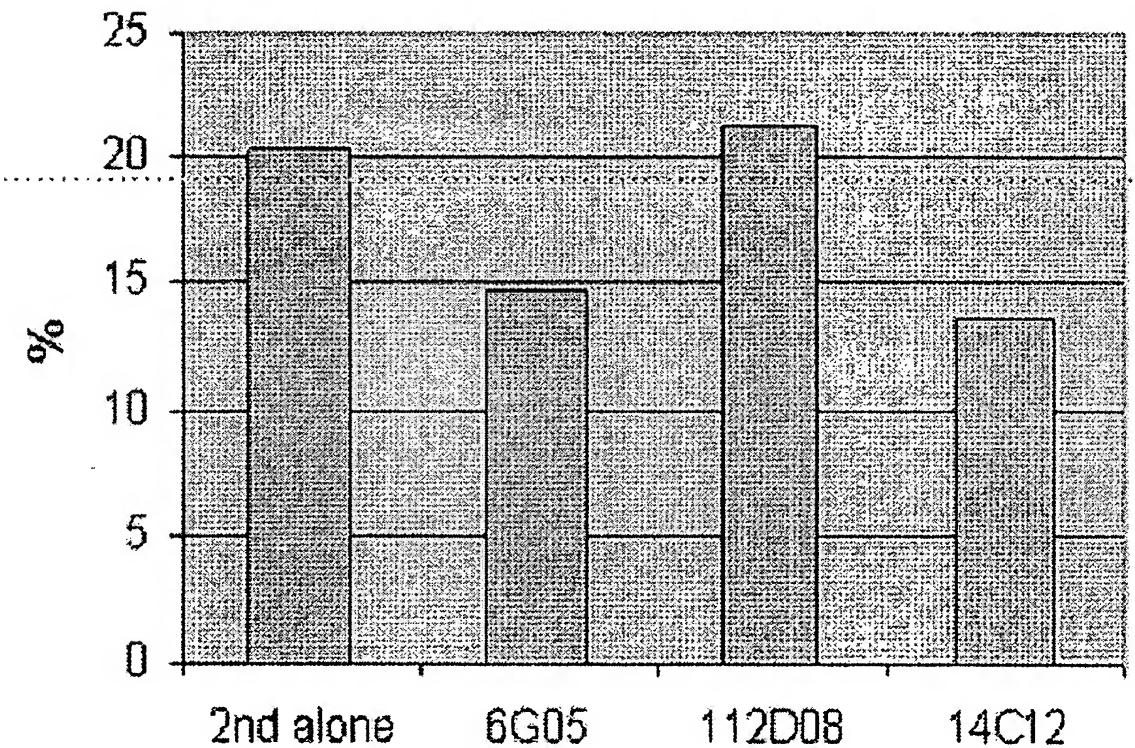


FIG. 32B

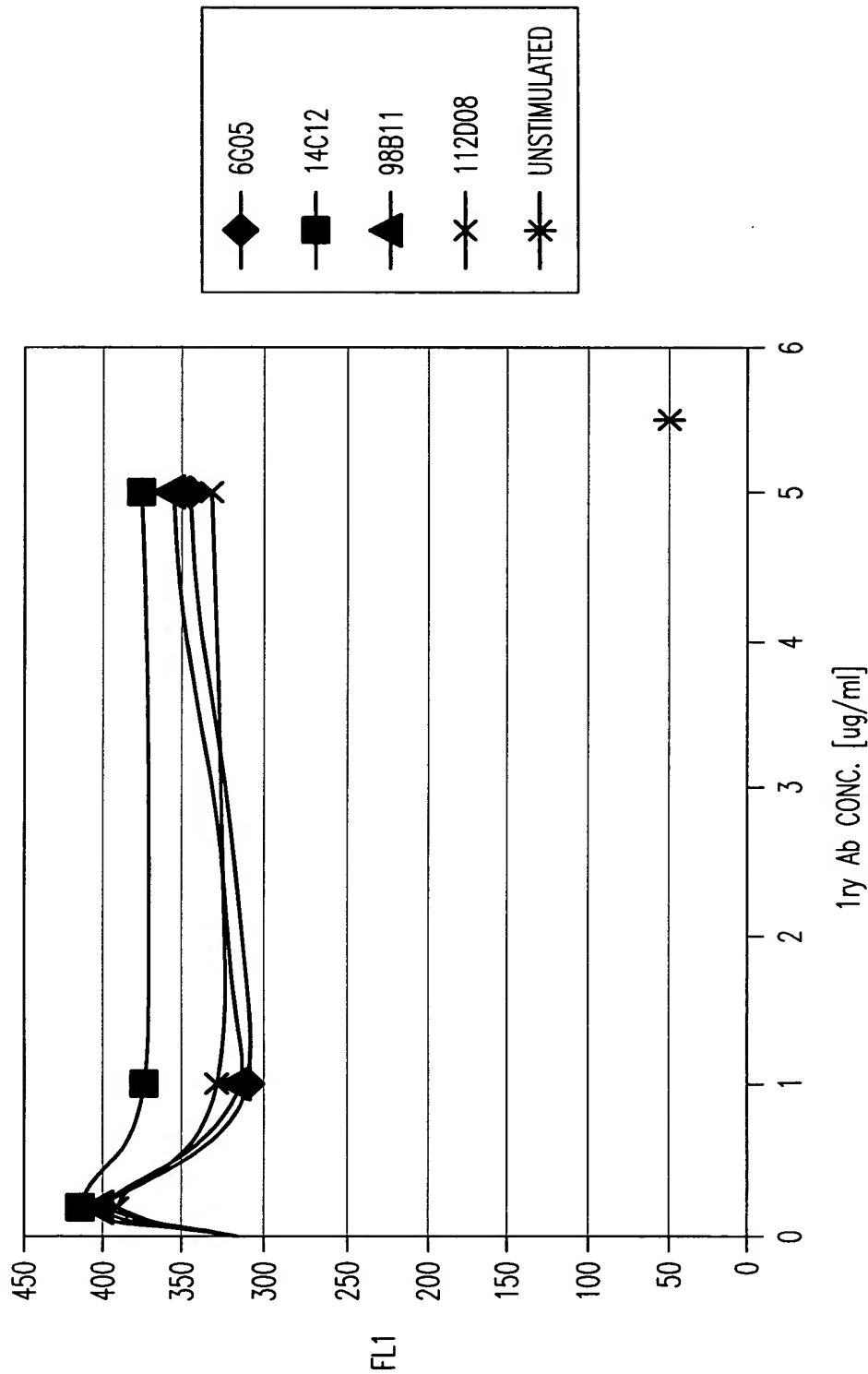


FIG. 33

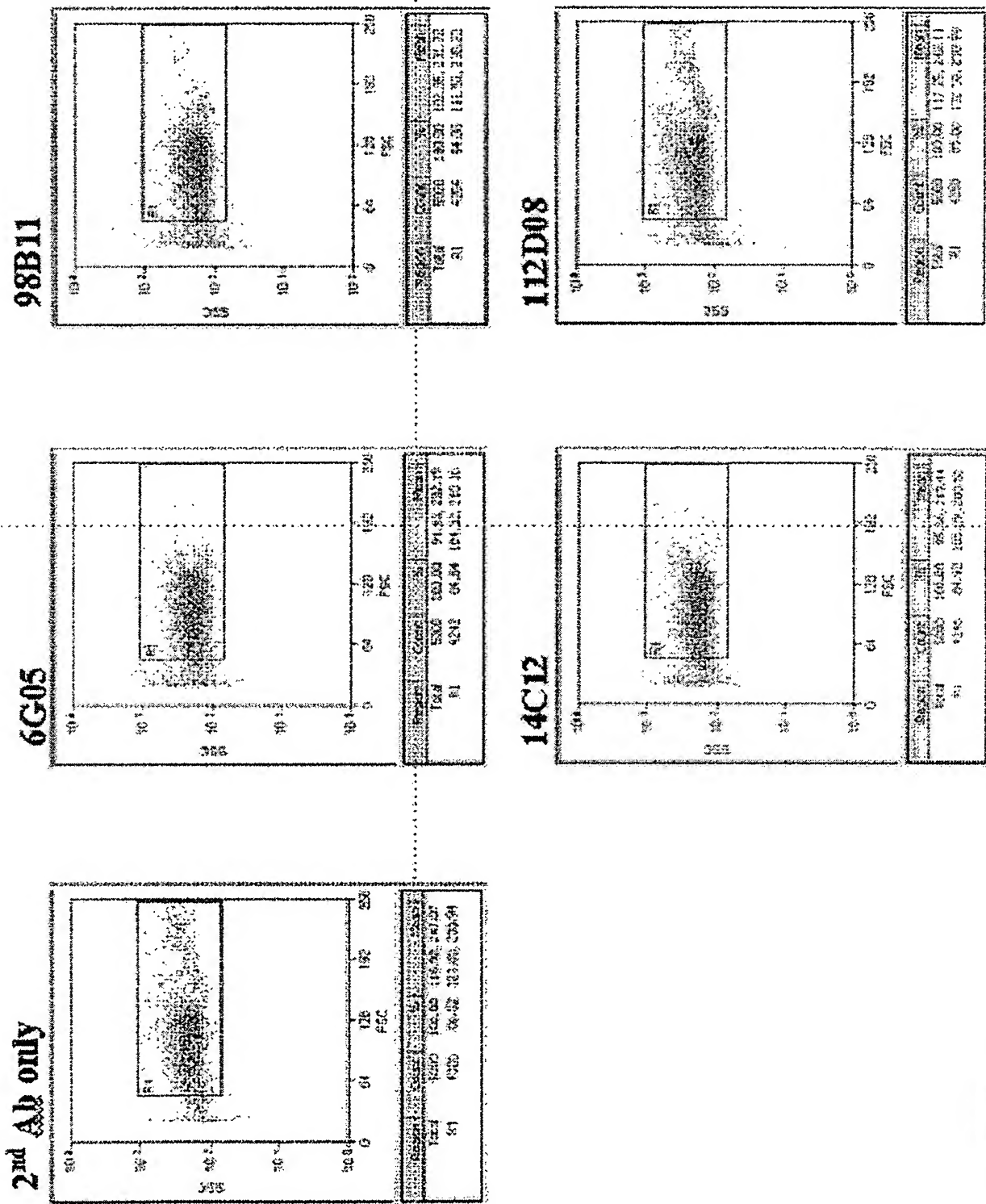


FIG. 34

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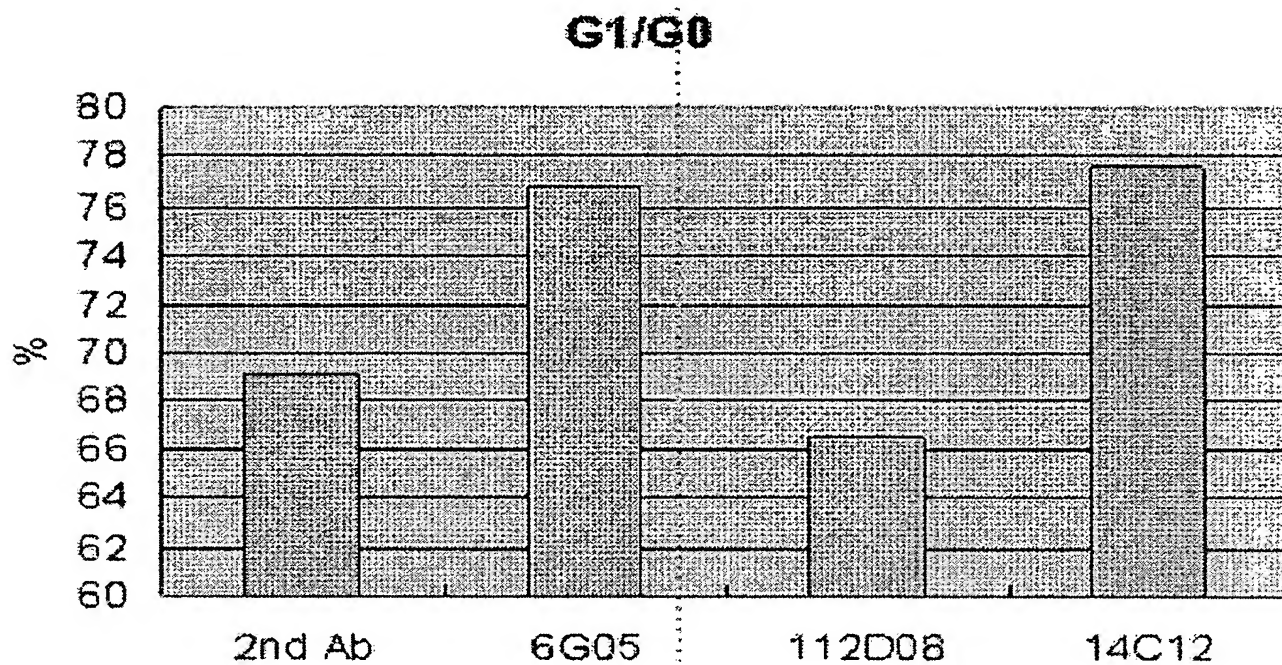


FIG. 35A

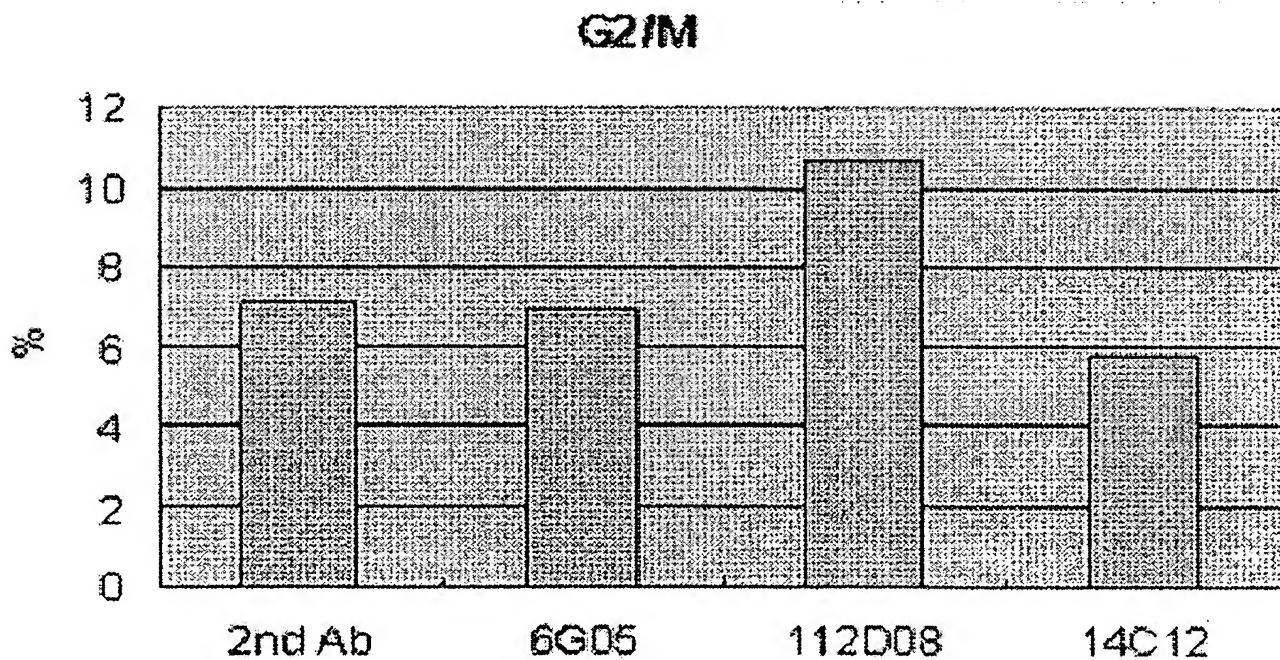


FIG. 35B

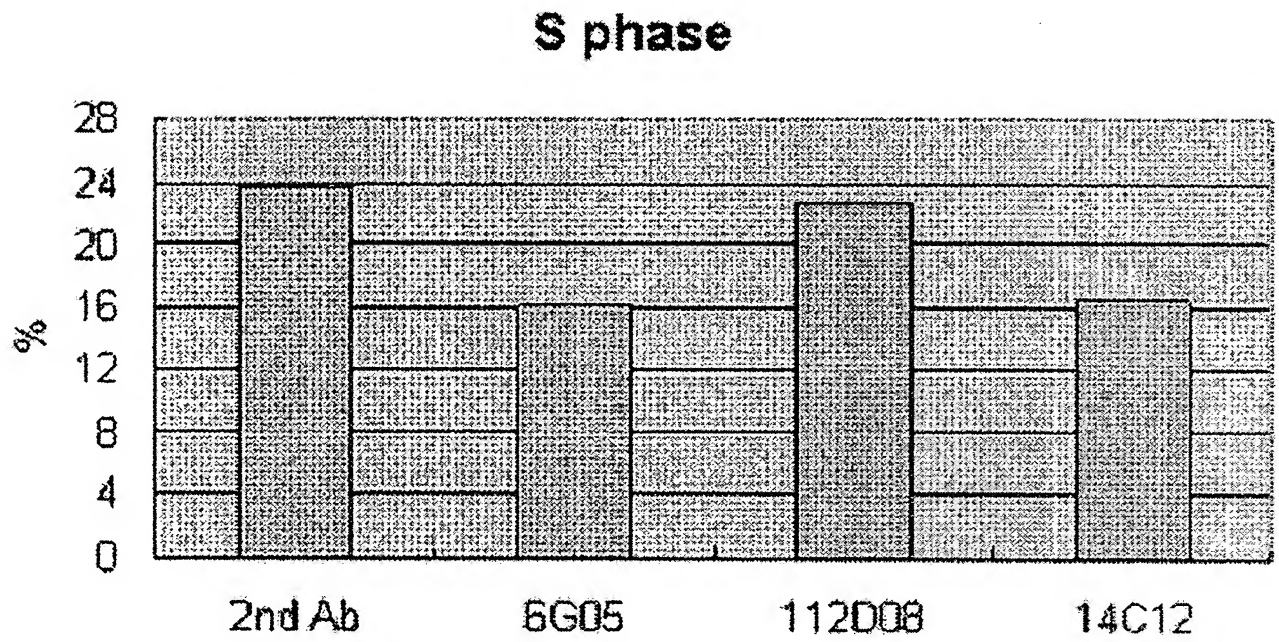


FIG. 35C